

THE ART OF
PRINCESSES
MONONOKE

A FILM BY HAYAO MIYAZAKI



THE ART OF

PRINCESS MONONOKE



PRINCESS MONONOKE

There was a time, long, long ago,
when people killed the Forest Spirit

Human face. Body of a wild beast.
Horns atop his head like the trunks of massive trees.
For what reason did the humans take his life?

The human population was large.
Much of the primeval forest had been cut.
Here and there, bits and pieces of the forest remained,
defying the humans' attempt to penetrate it.

These wooded refuges were protected by giant and godlike beasts,
animals of the forest, wild boars and wolves,
who would give their very lives to preserve the ancient forest.
They were the raging gods of the forest who attacked the humans
who invaded their sanctuary.
They revered the Forest Spirit.
They did as he commanded.

The clan called the Tataru were makers of iron,
and it was the Tataru who fought battle after savage battle
with the raging gods of the forest.

Their leader was a woman, Lady Eboshi.
Her lieutenants Gonza, Toki, and Kohroku did Lady Eboshi's bidding.

And the mysterious monk, Igo, who is sworn
to defeat the Forest Spirit...
Whose ally was he really...?

Okkoto, Moro, a giant white wolf, and Nago are the forest gods
who follow the Forest Spirit
(and the tiny tree spirits called kodama).

The girl San was born a human,
But she was raised by Moro
to be Princess Mononoke, the Spirit Princess.
She loathed the humans who invaded the forest,
and she sought to protect the sacred sanctuaries
by killing the invaders.

An orphaned youth, Ashitaka, a warrior of astonishing skill,
joins the final battle between the Tataru and the raging forest gods.
His arm bears a twisted scar: the spell of a strange curse
that is slowly killing him.

His search for a way to break the spell
has led him to the camp of the Tataru.

Ashitaka and San meet
in the midst of the carnage and chaos of the battlefield.
Fighting on opposite sides.
What hope could there be for feelings of love born of a place
steeped in hatred and killing?

In the weaving of this epic tapestry,
which current will prove stronger—
the battle for the forest between human and beast
or
the love between warrior and princess?

Princess Mononoke

The trembling string of the taut bow
Our heart gleams in the light of the moon

The beauty of the keen-edged blade
Your profile like the tip of the sword
Those who know your true heart hidden in
your sadness and anger
Are only the small spirits of the forest

The Legend of Ashitaka

A legend is
A tale hidden in the grasses,
passed on from ear to ear

People have recounted without ever
forgetting the story of
A young, nameless in history, who lived in an
outlying area

How valiant and courageous
Was the youth called Ashitaka...
Though cruel fate toyed with him
How deeply he loved people and the forest...
How clear were his eyes...

And in their hearts lives the stoic people who
dwelled in the mountains
passed over and over to their children

Be like Ashitaka
Live like Ashitaka...

The People Who Were Lost

When this island was covered by high forests
In the far eastern land where bamboo and oak trees
flourished lived a proud people

The man rode astride of albatrosses—of legend
On waves tipped with jade
The brave rode the mountains and fields
The women shaved and arranged their hair and
adorned their bodies with jewels
On high mountains they were graceful and beautiful
The people revered the gods of the forest and
listened to the breath of the forest
As they made songs of the forest's voice

When a power the humans called god surged from the western land
The people resolutely fought against it
At times they were victorious in pushing back the general's armies to
the flatlands and plundered their storehouses
But as they were defeated and hid deep in the mountains
Their battles raged for years and years
The influx of power from the west was endless
In time, the people lost their abundant life, people the land

Eventually the people were forgotten and
concealed beneath the waves
Time flowed by the power of the waves flowed,
The songs of the generals faded
And when the land is filled with hatred and strife
The child of the lost people will surely return
Attired in the same way as in ancient times, with a red sash
Having a reverence for the forest and a hatred of grass
He will surely ride like the wind through this cursed land

Why? It is because the blood of the lost people
Remains still deep in the heart of the land
Even as they have been oppressed, for the blood did not dry
It is firmly imparted within the people

The Demon Spirit (Tatari-gami)

The malicious god comes from
the western land
Its wings of black / covered in scarred
black snakes

Swallowing up everything before
it runs, from darkness to darkness
The old god of mountains and valleys
attracted by people

And the forest was the realm of
The god in the form of a glaucous bear
Its bones crushed, its flesh mangled, creased
With the pain of its wings and its anger
It ran and roared through the mountain and valley
Gathering the full force of the curses and
rain, depleted in the land
And finally turned into a
demon spirit

All the karma of the world took the
form of the animal
All things less their strength when faced
with its anger

It mustn't be approached;
It mustn't be restrained
We can only hold our breaths and
wait for it to pass by

You wretched old god
If I could, I would like to give you
peaceful sleep,
O great god of the mountains

Wolf Goddess Moro

You mustn't peer into her eyes
Because she will tear you apart
with despair

Because she will eat your heart
while it is still beating

The wolf goddess is a survivor from the old
world

Her bristly silver hair and two tails are the
faint signs of primeval gods

Moro is the counterpart of nature that exists de
is and is a mirror of the world

Despair is the true essence of life

Mercilessness is the true character of life

Her gentleness is the gentleness
of life itself

What is more,
she has learned hatred from humans

Lady Eboshi

A heart of steel that feels no one

An intense will, sympathy for the vulnerable,
unsparing toward enemies

The nepe of her neck white, her erms slender,
she exudes power

A woman who proceeds without wavering
along the path

She has chosen for herself
While attracting the reverence
of her underlings

You gaze far into the distance

Are your eyes looking into the future?

Or are you gazing even now into the hell
that you saw in the past? ...

Kodama Tree Spirits

Just when they seemed to appear
They tittered in laughter and have already disappeared
Just when they seemed to be walking at my feet
They were already in the distance far away, laughing

When spoken to, they run off in shyness
When ignored, they come close

You small children, children of the forest
Ah, to you this forest that you inhabit is so full of fun

Yakul

Noble, great red ah
Descendant of a species headed for extinction
Your hooves have no fear of steep slopes
You dart through the mountains like a flitting bird

My dear old friend for whom I yearn
Loyal beast
Your coat of fur is glossy
Your gaze is as warm as a mother's

Come, let us go together to the ends of the earth

The Forest of the Deer God (Forest Spirit)

The forest that has existed since the world was born
In this world of deep shadows filled with the essence
of all creation

Live creatures that have become extinct in the human world

A forest where the Deer God still dwells
A wondrous beast with antlers like branches,
a stirring human face,
And the body of a deer
Dying with the moon and reviving with
the new crescent moon

Having the memory of when the forest was born and
the pure heart of an infant
A brutal and beautiful Forest Spirit
that presides over life and death

In the places touched by its hooves
Grasses put forth shoots, trees breathe life anew
Wounded animals regain their strength
In the places reached by its breath
Death comes effortlessly, the grasses wither
Trees decay, animals die

The forest where the Forest Spirit lives is a world where life
glistens and sparkles
It is a forest that denies entry to humans

The Battle Between Humans and Ferocious Gods

Hayao Miyazaki

In this film, samurai, lords, and peasants who are extremely flustered at good demons battle with evil demons. Even when they die, they put their souls in even more surprising roles.

The main characters are humans who do not appear in the main stage of frames and ferocious gods of the mountains. The human characters are woodworkers, members of the non-productive group, engineers, farmers, laborers, town gatherers, and harvest makers. They are transparent such as peasants and craftsmen. They are in those times named and had formed imagination that might today call cottage industry and working groups.

The ferocious mountain gods that control the human system as evil gods, born gods, and in the form of humans. The forest spirit, Deer God, the key figure in the story, is an entirely imaginary creature with the face of a human, the body of a beast, and antlers of tree branches.

The young wife protagonist is a descendant of the famous people who disappeared into a long dream in ancient times by the poison-like poison of Yamato people. And if we search for a similarity for the female lead, she is in appearance not unlike a key figure from the Jōmon period - 13,000 BCE-300 BCE.

The main humans are the harvesting, they live off of the gods and the forest-like Iron Tower from Iron in myth.

The main natural period drama is times of battles, music, and forming villages with a paddles are on a distant backdrop. Rather, when I plan to recreate in the landscape of Japan then there were few people, when there was no flame, and when the forest was dense. When nature had a high level of purity with its deep mountains and dark valleys, pure and cooling rivers, vastness, dirt roads, and large numbers of birds, forests, and rivers.

With this setting, my aim is to depict a first image of the characters without being bound by the conventions, previous pattern, and prejudices of traditional period drama. Recent research in history, ethnology, and archaeology has shown that our country's history is by no means more diverse than we are generally led to believe. The pattern in period drama has almost all been rented from the drama in film. Disorders and trouble were the norm in the world of the Muromachi period (1336-1573), the period setting for this film. It was a time when post-medieval Japan was being torn apart by social upheaval, when those below overruled those above from the days of the Northern and Southern Courts period (1336-1392), and the rise of a new army, struggling at multiple, and the human rise of new arm hold sway. It differed from the Warring States period (1467-1568) when a reign of battles and fought between a standing armies, and also from the Edo period (1603-1868) when peace and order reigned.

There was a more rugged world and that time, more imagination and fire, with its own class distinctions between nobles and villagers and human displayed in the drawings of birds and landscapes. In such a time, the numbers of life and death were very close. People lived, loved, feared, worked, and then died. Life was not full of hardships.

Human life is the meaning in creating this work, as we face the coming chaos era of the post-war recovery.

I am not attempting to solve the eternal world problems. There can never be a happy ending in this human forces of humanity and ferocious gods. Yet even amidst to feed and strange life is still worth living. It is possible for something precious and beautiful things to rise.

I will depict a message, but that is in order to show the fact that there is something more precious.

I depict the bondage of a time in order to show the joy of liberation.

What I will show is the box reminding a misunderstanding of the god, and the process of the god's humanizing up to the last.

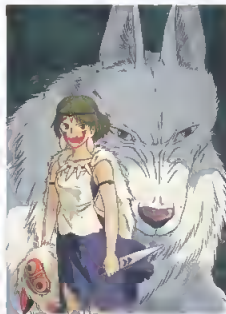
In the end the god may say to the hero, "There you, what do you do? You're human being."

The boy will smile and say, "That's all right. Won't you live together with me?"

This is the kind of idea I want to make.



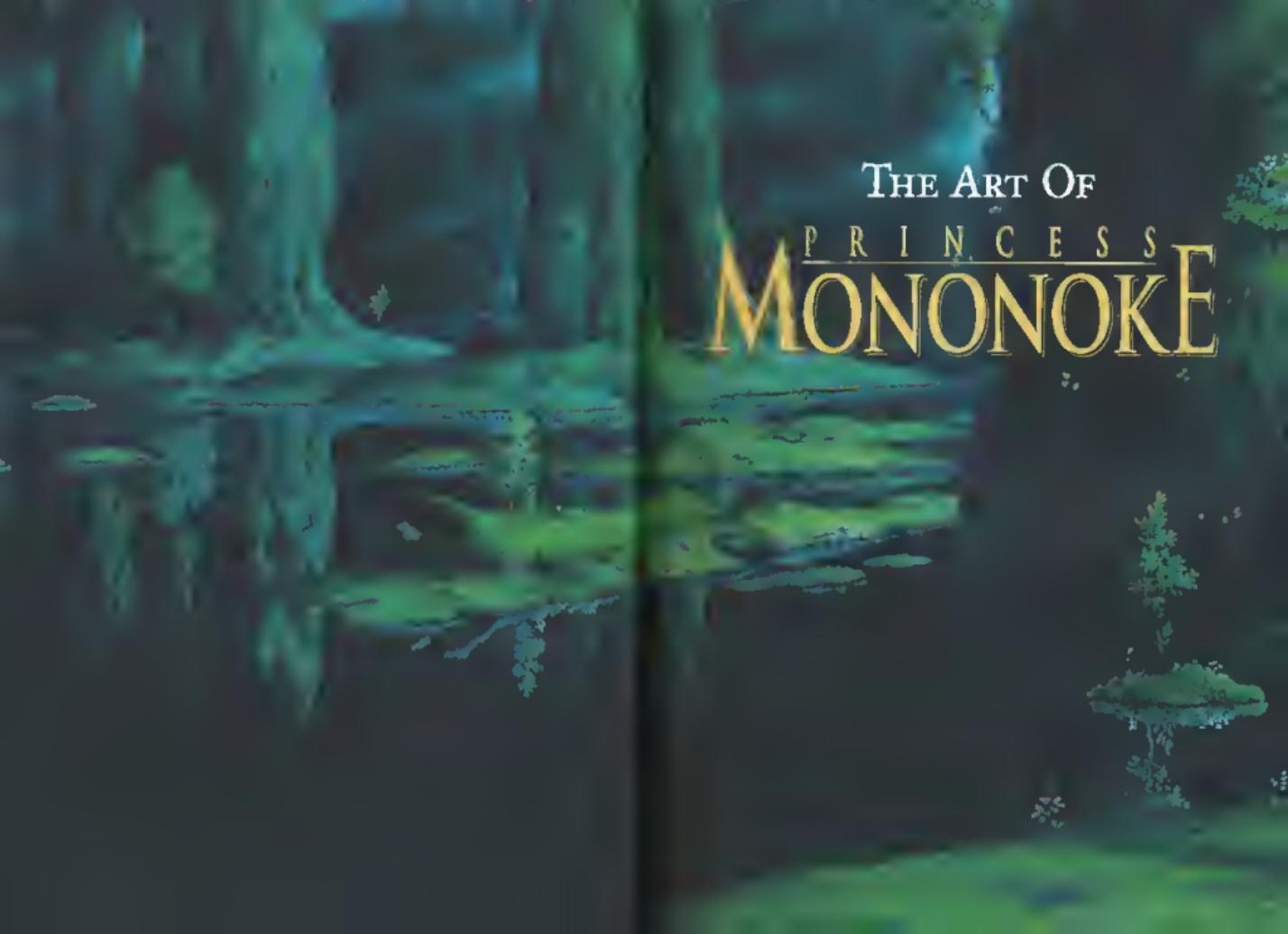
Art for the first poster



Art for the second poster



Preliminary concept sketch



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About This Book

This collection of concept sketches, concept art, backgrounds, and cel art follows the story of the animated film *Princess Mononoke*, written and directed by Hayao Miyazaki. All concept sketches are by Miyazaki; concept art is by Nizou Yamamoto, Naoya Tanaka, Yoji Takeshige, Satoshi Kuroda, and Kazuo Oga. Miyazaki's storyboards and story sketches along with character designs by supervising animator Masashi Ando have also been included to aid story continuity. Some cel drawings have not been image processed and may appear different from images in the completed film.

[P11] Storyboard (scene not rendered in film) [PP4-7] Opening shot of the cloud-shrouded mountains = Background art [PP8-11] Opening shot of the primeval beech forest = Background art [PP14-15] Forest of the Deer God = Concept art

The Curse of the Demon Spirit

A demon spirit attacks the hidden village of the Emishi clan in northeast Japan. Ashitaka, the last prince of the Emishi tribe, kills the demon with his bow to protect the village. This act brings a life-threatening curse upon Ashitaka, and an ominous red scar appears on his right arm. The young warrior embarks on a journey westward to find a way to lift the curse.



Ashitaka looses an arrow at the demon spirit rampaging toward the village = Storyboard

Mountain Village in the Northeast

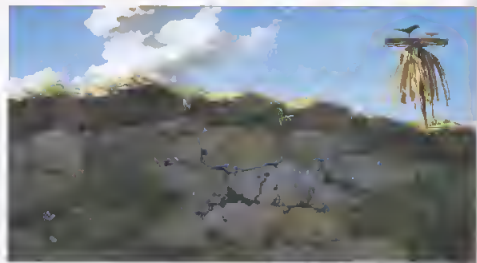
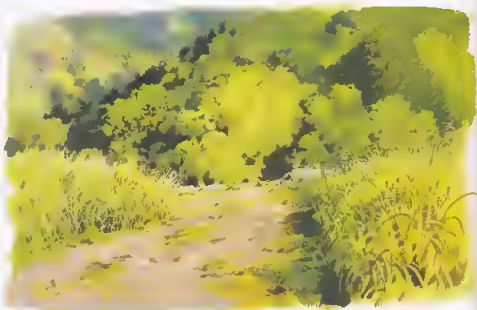
A watchtower and field in the foreground, and the green mountains near the Earsie village in the background = Concept sketch





[Top left] A slope surrounded by a stone wall = Concept art [Middle left] The watchtower = Concept sketch [Bottom] San and Ashitaka right the demon spels = Cel art [Right] A path stretches toward the watchtower = Background art





[Top] A millet field near the village = Concept art
[Bottom] A moss-covered stone wall = Background art

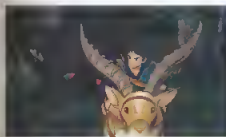


[Top] A valley grove below the watchtower = Concept art
[Bottom] A rocky outcrop scorched by the demon = Background art

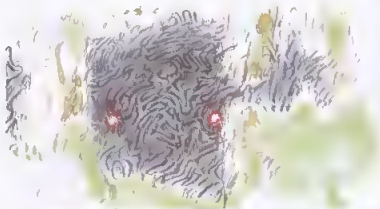
The Demon Spirit Attacks



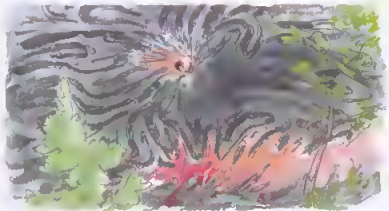
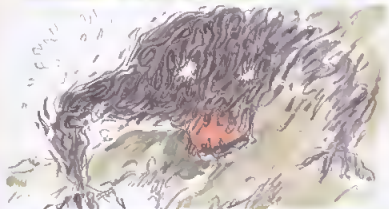
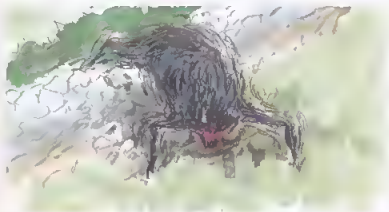
[Top] The demon breaks through the stone wall - CG image [Middle] The demon lunges forward with its snake-like black tendril, burning the grass in its wake - Cel art [Bottom] Three Erashu girls sense something is amiss. The girl in the middle is Kaya - Cel art

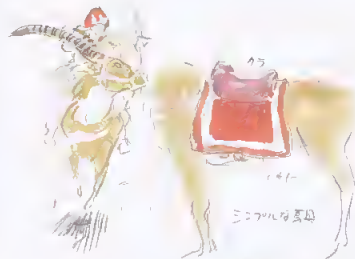


[Top left] The demon chases Ashtaka - Cel art [Top right] The wrathful demon lashes out with its tendril - CG image [Middle left] Ashtaka lets fly an arrow - the demon's tendril coiled around his arm - CG image [Middle right] The arrow pierces the demon's head, and the tendril falls away, revealing a mortally wounded boar god - CG image [Bottom] The Erashu tribe watches the boar dissolve into a skeleton - cel art



The enraged demon emerges from the forest - Storyboard





Ashtaka and Yakul = Concept sketches. In initial sketches, Yakul's horns had more ridges, and Ashtaka's eyebrows were thicker.

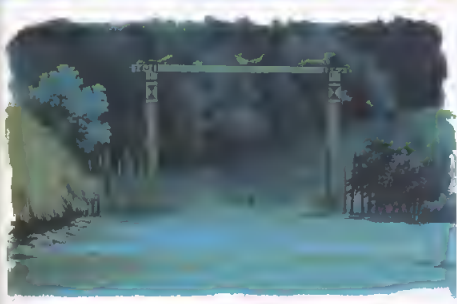
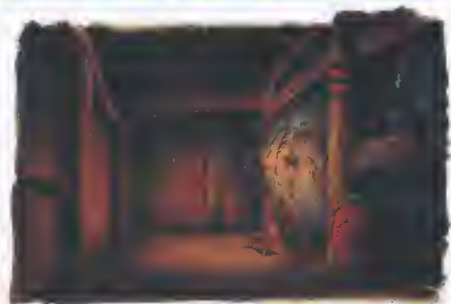


Ashitaka and Yaku - Concept sketches. Ashitaka was given various looks with short hair, wearing a straw raincoat



At the Emishi Village

[Top] A bird-eye view of the Emishi village - Background art
[Bottom left] Inside the Emishi clan's shrine (assembly hall) - Concept art
[Bottom right] The village gate on the night of Ashitaka's departure - Concept art





[Top left] The Emishi men, who have gathered at the shrine, gasp upon seeing the scar on Ashitaka's arm. Jisan is second from left = Cel art [Middle left] The wise woman Hisi-sama reveals to Ashitaka his fate. The oracle stones tell her that Ashitaka must travel to a western land = Cel art [Bottom left] Ashitaka departs to find a way to lift the deadly curse. A village girl, Kaya, gives him a dagger to remember her by = Cel art [Top right] The Emishi village, the wise woman Hisi-sama, and a villager = Concept sketches [Bottom right] Jisan = Concept sketches



Ashitaka's Departure

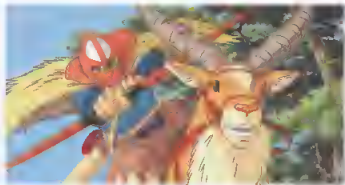


Ashitaka rides Yakul across the ridge line before daybreak - Oil art



(Top left) A delta spreads out beyond the highlands. In the valley are fields and a temple on fire = Concept art (Bottom left) A scene of a farming village with straw-thatched houses scattered amidst the fields = Concept art (Right) Panoramic view of the delta. Smoke rises from a farming village surrounded by low rolling hills = Concept art





[Top left] Ashtaka feeds Yakul on a rocky outcrop overlooking the delta. A river and a flock of Japanese crested ibis below. * Cel art [Middle left] Ashtaka happens upon samurai bandits plundering the farming village. He tries to shoot an arrow from atop Yakul, but a terrible pain shoots up his scarred arm. * Cel art [Bottom left] After escaping into a cedar grove, Ashtaka holds his arm under a tiny waterfall to soothe the pain. * Cel art [Right] The dense cedar grove is dark even during the day. * Background art



In Town



[Top left] The town where Ashtaka stops for provisions. The bustling marketplace with street stalls = Cel art [Bottom left] The riverbank near town = Background art [Top right] Ashtaka buys rice from a vendor. Curious passersby gather around him and Yakul = Cel art [Bottom right] Simple booths held up by wooden poles rise the marketplace = Background art

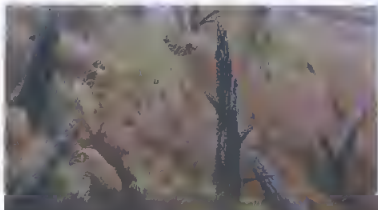




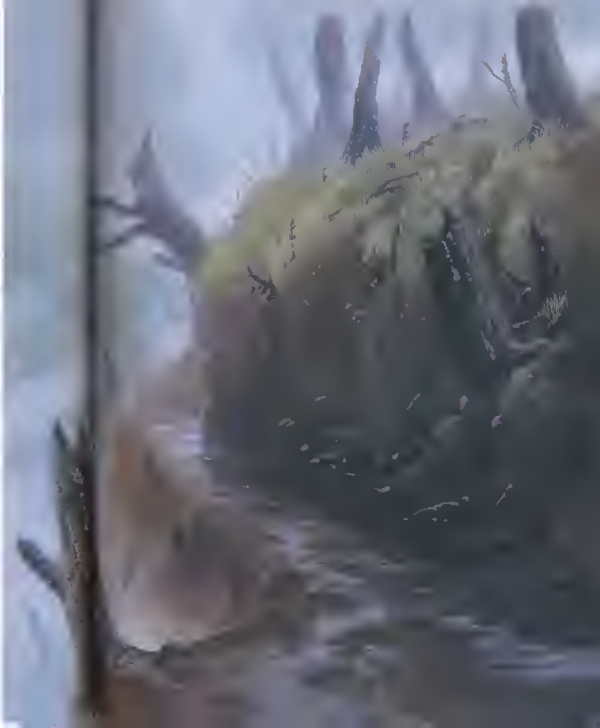
(Top left) The country road on which Ashtaka and the mysterious monk Jigo leave town = Concept art (Bottom left) The stone monument and barren land where Ashtaka and Jigo make camp = Background art (Top right) Seeing Yaku, Jigo takes an interest and tries to intimidate himself into Ashtaka's favor = Cel art (Middle right) The two men make camp in the shadow of a fallen tree. Jigo tells Ashtaka about the forest of the Deer God (Forest Spirit) = Cel art (Bottom right) Jigo is a member of a mysterious mercenary group that is after the head of the Forest Spirit, said to have the power to grant eternal life = Character design

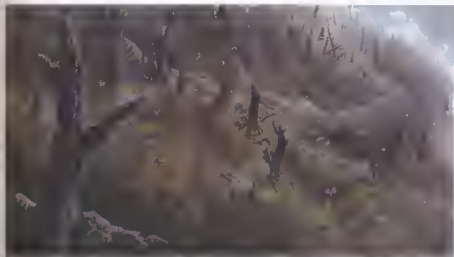
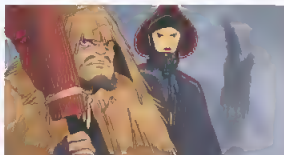


The Ox Caravan Pushes Through the Rain



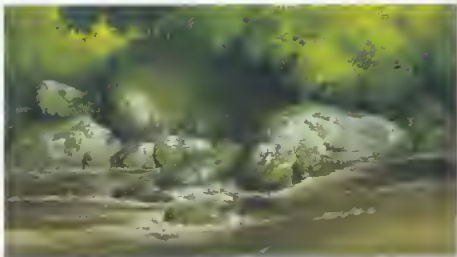
[Top left] The hillside leading to Iron Town—the fort of an ironworking clan known as the Tataa. Fallen rocks litter the burned hillside and charred trees stand like grave markers = Concept art [Bottom left] The ox drivers and guards advance up the steep slope in the rain = Cel art [Right] The narrow cliff road to which the ox caravan retreats when the wolf clan attacks = Concept art



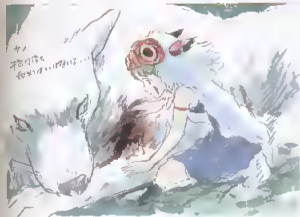


[Top left] Princess Mononoke (San) attacks the ox caravan, riding a wolf = Cel art [Middle left] Lusty Choshu (the leader of the ox caravan) and her loyal lieutenant and captain of the guard, Gorza = Cel art [Top right] The battleground of the wolf clan and ox caravan = Background art [Bottom] The horrible scene after the attack, withering oxen, fallen and paralyzed men, the bloody path, and scattered cargo = Cel art

The Encounter with San



[Top] Ashtaka discovers the bodies of men and omen in the raging current = Concept art [Bottom] The river swollen from heavy rain. Boulders and fallen trees obstruct the current = Concept art



[Top] San sucks the poisoned blood out of the giant wolf (Morol) wounded by a bullet. Ashtaka encounters San and Moro for the first time = Cel art [Middle] Ashtaka calls out to San, but she does not answer = Cel art [Bottom] San tries to treat Moro's wound = Storyboard (scene not rendered in film)



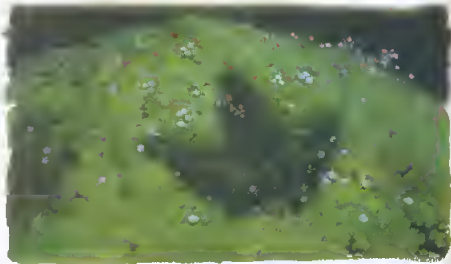
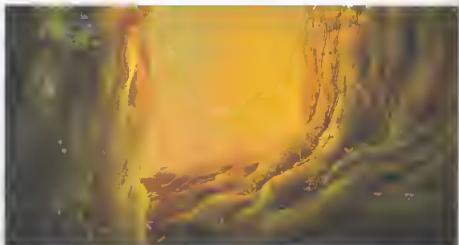
The human girl San was raised by Moro, a 300 year old wolf goddess. She wears a clay mask and hates the humans encroaching upon the forest - Cel art (character only) and concept sketches

Through the Evergreen Forest



(Top left) The forest where Ashitaka encounters a kodama—a tree spirit—after rescuing the ox driver Kohroku = Concept art (Middle left) The ox driver Kohroku from Iron Town = Character design (Bottom left) Ashitaka and Kohroku discover a kodama. Kohroku fears the kodama will call forth the Forest Spirit = Cel art (Right) The dim and densely canopied evergreen forest inhabited by kodama = Background art



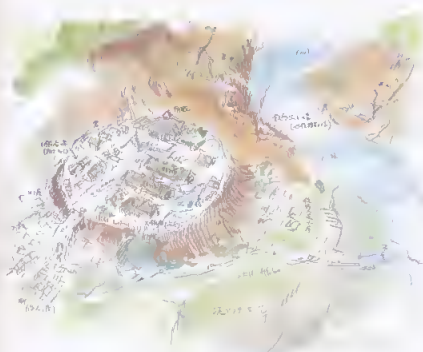


[Top left] The area where Ashitaka spots the Forest Spirit as the kodama guide him into the realm of the Deer God. The shimmering Deer God appears from between two massive trees = Background art [Bottom left] A huge footprint of the Forest Spirit (Nightwalker) on a mossy ground = Concept art [Right] The way to Iron Town at the base of the mountain = Background art



The Tatara Ironworking Clan

Ashitaka meets Lady Eboshi, the leader of Iron Town, who has been waging war over the forest against San and the vengeful animal gods. Eboshi seeks to cut down the forest for humanity, while San wants to protect it. Ashitaka also learns that Eboshi's rifle bullet turned the boar god into a monstrous demon. San attacks Iron Town soon after.

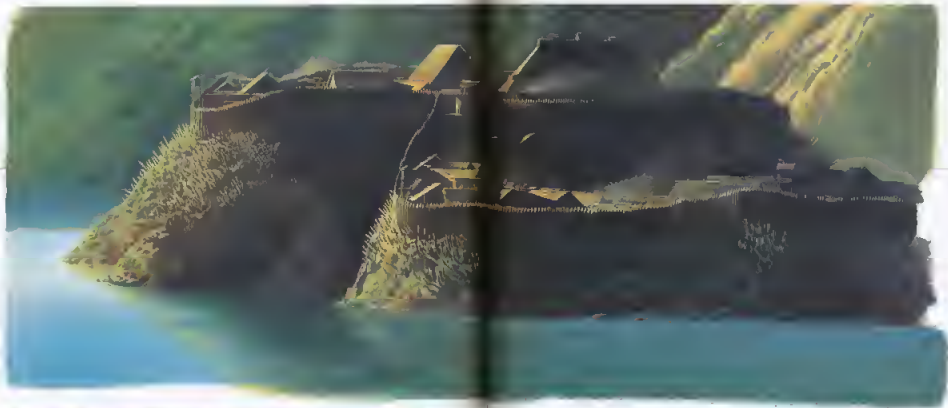


(Left) A Kodama - Preliminary concept sketch
(Right) An aerial view of Iron Town in the film, the town sits on a lake - Preliminary concept sketch

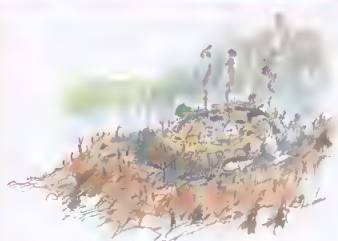
The Flaming Ironworks

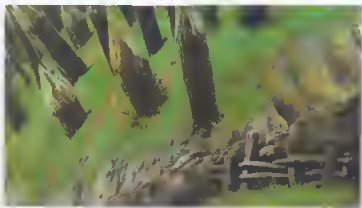
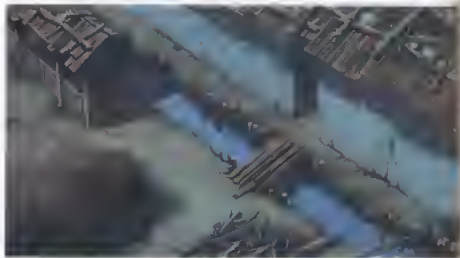
The ironworks mines the mountains, smelts iron ore, and forges iron in order to produce guns. There is a hot iron mass at the main building entrance » Concept sketch



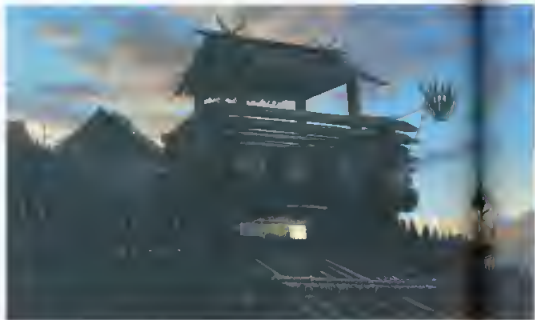
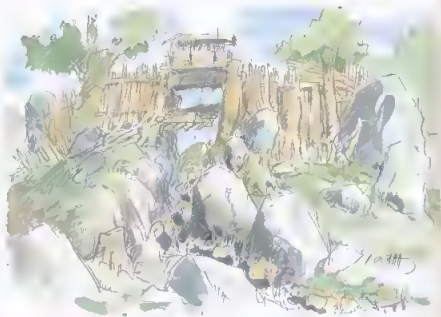


Top: A tree in the foreground. The ironworks sets like a malignant tumor and belches smoke
 - Background art (Bottom left) Iron Town's buildings blowing up smoke into the sun -
 Background art (Bottom right) A panoramic view of Iron Town - Concept sketch



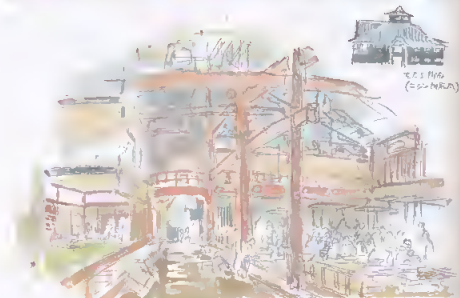


(Top left) Inside the town are canals and storehouses = Background art (Bottom left) The slope before the gate entrance = Background art (Top right) A row of coal fired kilns = Background art (Bottom right) A blacksmith's hut = Preliminary concept sketch

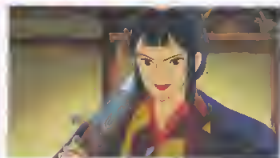


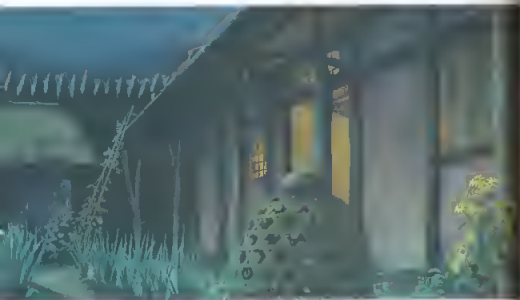
(Top left) The gated entrance into Iron Town. The ox caravan loaded with bales of rice climbs the steep hill. - Concept sketch. (Bottom left) The gate with sunset in the background. - Background art. (Top right) The ox caravan loaded with rice crosses the bridge to the gulf. - Cel art. (Middle right) Area where rocks are crushed using water power and dropped below. - Background art. (Below right) Ashitaka and Kohroku cross the lake aboard an ironworker's boat and come ashore. - Cel art.

Lady Eboshi and the Tataru



[Top left] Interior of the great hall - Background art [Bottom left] Interior of the great hall - Concept sketch
 [Top right] Lady Eboshi welcomes Ashtaka as a guest (left) and inquires about the purpose of his journey - Cel art
 [Middle right] Ashtaka learns that Eboshi fired the shot that caused the demon spirit's curse. Lady Eboshi remains calm before Ashtaka trembling with anger - Cel art [Bottom right] Lady Eboshi - Concept sketches



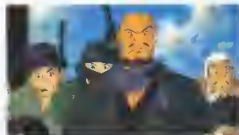


[Top left] A dim light looks from the town's sick ward = Back ground art [Bottom left] Eboshi shows Ashitaka into the sick ward where lepers are busy making guns = Cel art [Top right] Cheerful women work the bellows with their test = Cel art [Middle right] The women, facing right and left, stoop on the bellows = Cel art [Bottom right] The women take an interest in the handsome young warrior and sneak a peek in the ox drivers' quarters (left) Toki, the leader of the women = Cel art



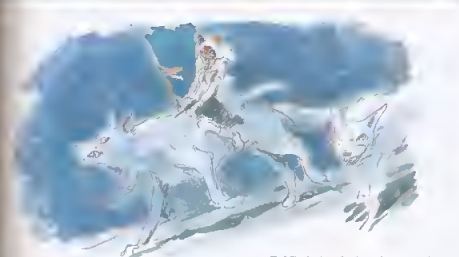
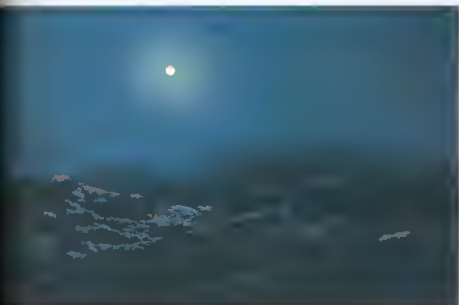


[Top] Riflemen make camp to guard against wolves • Storyboard [Middle] Riflemen • Concept sketches [Bottom] Lady Eboshi with Gonza and riflemen in tow (Flashback scene of Eboshi's battle with the boar god) • Cel art

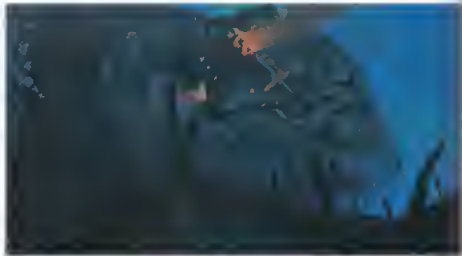


[Top left] Guard captain Gonza and a black-clad Tataro woman • Concept sketch [Top right] At first, Gonza suspects Ashitaka is a spy of enemy samurai • Cel art [Middle] Gonza • Character design [Bottom] From the 'drivers' story, Ashitaka learns of how the boar god turned into a demon (Flashback scene of Eboshi's battle with the boar god) • CG image

Princess Mononoke's Night Raid

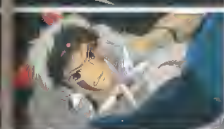
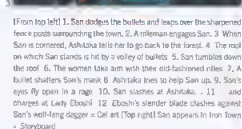
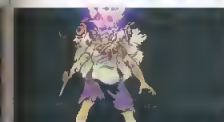
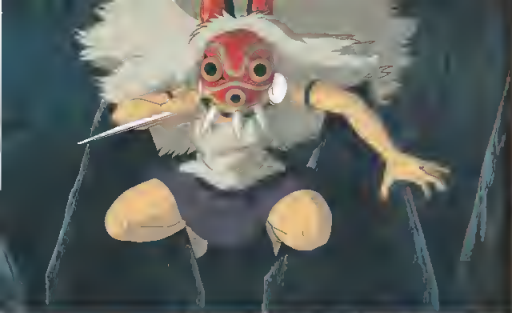


[Top] The howling of wolves echoes ominously across the hillside laid bare in the moonlight - Background art [Bottom left] San rides atop her wolf-brother past decimated trees - Cel art [Bottom right] Wearing a clay mask, San and the wolves head for Iron Town - Storyboard

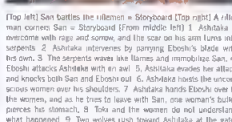


[Top left] Aerial view of Iron Town at night. Only the main building remains lit, blowing up steam = Background art
 [Middle left] San races for Iron Town in the dark night = Cel art [Bottom left] An unlit hillside overlooking Iron Town. The apes have come to plant trees to restore the forest but are scared away by Edoash's rifle shots = Cel art [Right] A hill overlooking the town whose trees have been wintently cut down. San and the wolves pass through the dry creek bed below = Background art





[From top left] 1. San dodges the bullets and leaps over the sharpened fence posts surrounding the town. 2. A rifleman engages San. 3. When San is cornered, Ashitaka tells her to go back to the forest. 4. The rail on which San stands is hit by a volley of bullets. 5. San tumbles down the roof. 6. The women take aim with their old-fashioned rifles. 7. A bullet shatters San's mask. 8. Ashitaka tries to help San up. 9. San's eyes fly open in a rage. 10. San slashes at Ashitaka. 11. and charges at Lady Eboshi. 12. Eboshi's slender blade clashes against San's well-tempered dagger. • Cel art [Top right] San appears in Iron Town. • Storyboard



(Top left) San battles the villamen. Storyboard (Top right) A villamen corners San. Storyboard (From middle left) 1. Ashitaka is overcome with rage and sorrow, and the scar on his arm turns into serpents. 2. Ashitaka intervenes by parrying Eboshi's blade with his own. 3. The serpents wave like flames and immobilize San. 4. Eboshi attacks Ashitaka with an awl. 5. Ashitaka evades her attack and knocks both San and Eboshi out. 6. Ashitaka hoists the unconscious women over his shoulders. 7. Ashitaka hands Eboshi over to the women, and as he tries to leave with San, one woman's bullet pierces his stomach. 8. Toka and the women do not understand what happened. 9. Two wolves rush toward Ashitaka at the gate. 10. Ashitaka leaves Iron Town with the wolves. 11. Ashitaka rides in darkness, Yukio stained with the wounded woman's blood. Cel art.



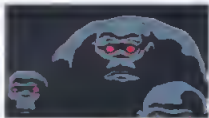
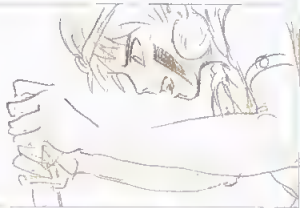
The Forest of the Deer God (Forest Spirit)

Though San hates humans, she is unable to kill the gravely wounded Ashitaka. She carries him to the pool of the Forest Spirit and leaves his fate to the Forest Spirit presiding over life and death. After the Forest Spirit breathes life back into Ashitaka, the warrior agonizes over whether to side with the humans or to save San. Is there no way to stop the fighting between the forest and humanity?



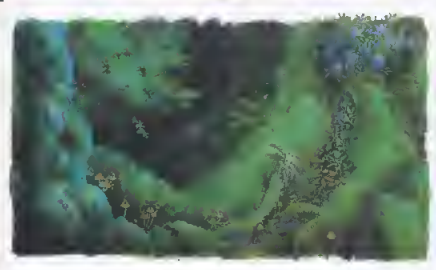
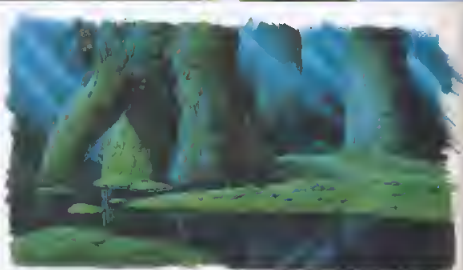
(Left) Kodama walking in a line • Preliminary concept sketch (Right) The Forest Spirit, an animal god that bestows and takes away life • Concept sketch

To the Forest of the Deer God (Forest Spirit)

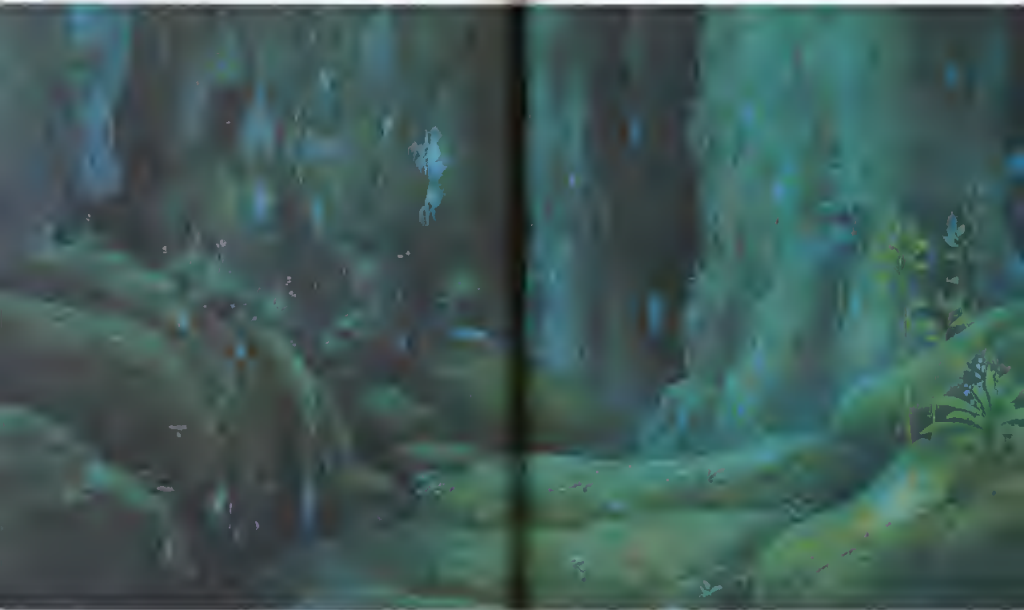


(Top left) Ashtaka is mortally wounded by a bullet. San tries to plunge the blade into his throat, believing that he interfered in the fight against Eboshi - Story sketch (Middle left) San falters when Ashtaka tells her, "Live. You're beautiful." - Cel art (Bottom left) The apes want to eat the human (Ashtaka) (top) and the wolves become angry at the apes' violence toward the Moro clan - Cel art (Right) The mountainous terrain through which San transports an unconscious Ashtaka on Yaku's back - Background art

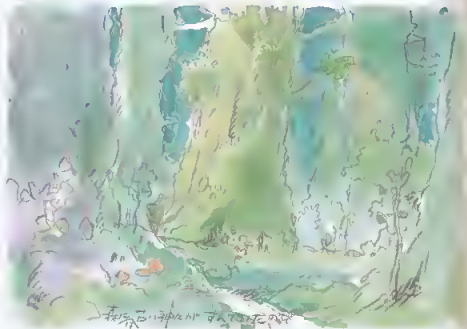
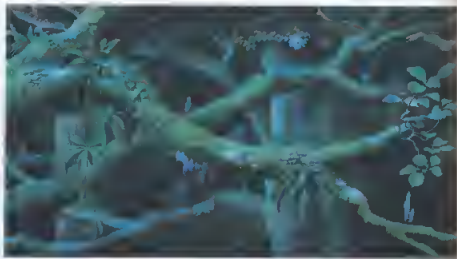




(Top left) The sky above the forest of the Deer God. The sun shines down over the green mountains = Background art (Bottom left) The forest interior with ancient, deep-rooted trees = Concept art (Top right) The primeval forest and moss-covered rocks = Concept art (Bottom right) Clusters of mushrooms and flowers grow about the roots of enormous trees = Concept art

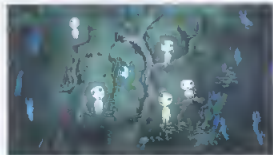
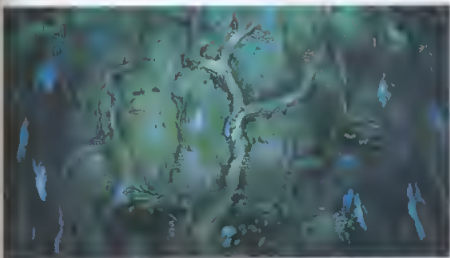


The forest near the pool of the Forest Spirit. Luminous moss seems to emit a pale light across the forest – Background art

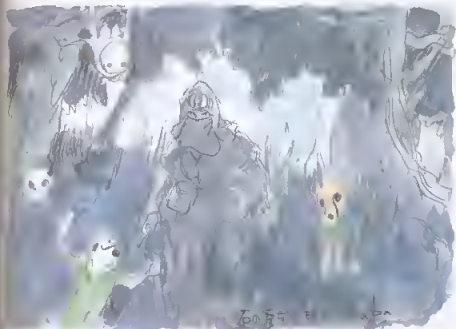
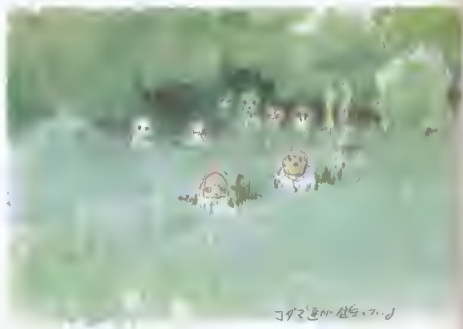


[Top] Tree branches covered in moss = Background art [Bottom] The forest with Miyazaki's handwritten comment at bottom, "Ancient spirits dwell in the forest."

Kodama Tree Spirits



[Top] Kodama tree spirits appear around San and Ashitaka's path to the pool = Background art [Middle] The kodama glow into view like lights = Cel art [Bottom] The kodama watch San and a mortally wounded Ashitaka pass through = Cel art



[Top left, top right, bottom right] Storyboards with Miyazaki's handwritten comments. "The kodama locking on," "into the forest armed only with a stone hatchet," "True to their nature, the kodama echo and mimic Ashitaka" In Japanese, kodama also means "echo." (Scene not rendered in film) [Bottom left] Playful tree spirits = Concept sketch

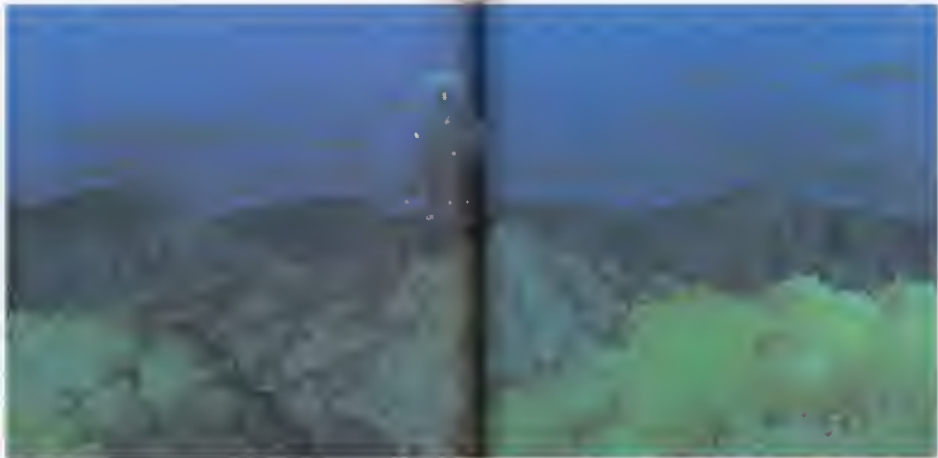
At the Pool of the Forest Spirit



(Top left) The tanguli waters and a tiny moss-covered island in the center of the pool = Background art
 (Bottom left) The side of the pool = Background art
 (Top right) San com mounds Yakul to wait (Middle right) San rests Ashtaka against the island shore. She sticks a branch into the ground like a grave marker and bes-jens for Ashtaka's heartbeat = Cel art
 (Bottom right) The pool of the Forest Spirit in the foreground with massive boulders in the background = Background art

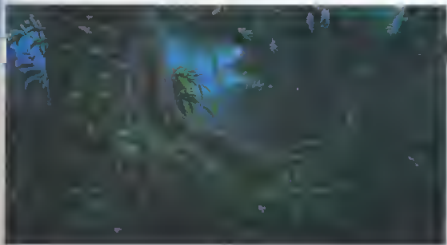
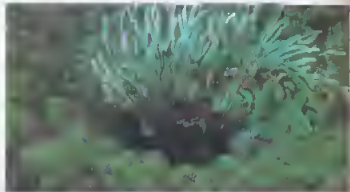
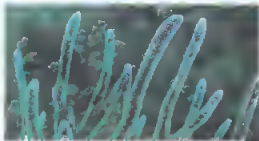


The Nightwalker



[Top] The sky grows lighter. The Nightwalker (the Forest Spirit's eight form) appears out of the forest to the clattering song of kodama = CG reuse [Bottom right] The rattling chorus ripples over the land = Cel art



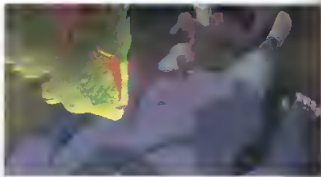
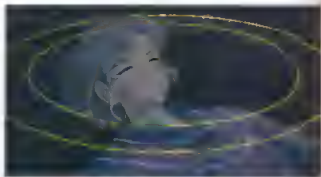


[Top left] The Nightwalker marks the forest. Its form is black as night and lickers like the stars - CG image [Middle left] The Nightwalker's fleshy antlers grow and retract - CG image [Bottom left] The Nightwalker retreats into a hole in the forest to his lair below dawn - CG image [Top right] Jago and the hunters, disguised in animal skins, finally find the Nightwalker - CG image [Bottom right] The tree overlooking the forest from which Jago and the hunters sight the Nightwalker - Background art

The Forest Spirit and Ashitaka



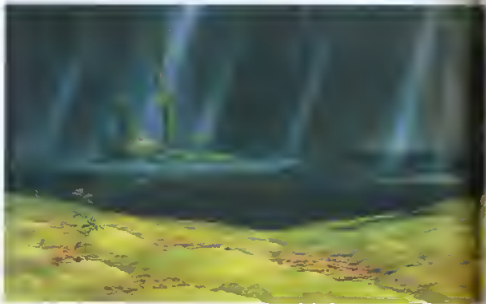
(Top left, bottom left, top right) Storyboards with Miyazaki's handwritten comments: "Grass sprouts around the Forest Spirit's hooves," "The deer god presides over the annual life cycles," (Middle right) The Forest Spirit stops before the sakaki branch (right), is he staring at Ashitaka or at the branch? His expression looks both benevolent and cruel (left) • Cel art (Bottom right) Plants sprout and wither from the ground where the Forest Spirit treads • CG image



[Top] The Forest Spirit appears between the giant trees at the edge of the pool = Oil art [Middle] Ashtaka floating in the pool of the Forest Spirit = CG image [Bottom] The life streams out of Ashtaka's wound. The gold-91 Forest Spirit stanches the wound with its mouth = CG image



The Forest Spirit, the giver and taker of life. Born during the new moon, the Forest Spirit repeats the cycle of birth and death along with the waxing and waning of the moon. Its head is believed to have the power to grant immortality = Concept sketches



[Top] The sky above the pool of the Forest Spirit. The tree stretches upwards, as sunlight filters in from above = Background art [Bottom] Sunlight shines down upon the pool = Background art



[Top] The sunlit beas at the edge of the pool = Background art [Middle] When Ashitaka awakens, San tells him that the Forest Spirit spared his life = Cel art [Bottom] San gives Ashitaka some jerky = Cel art

The Vengeful Boar God



[Top left] Okkoto appears atop a mountain peak overlooking the forest. The bear god and his tribe have come from Chinutsu (Kyushu) to defend the forest = Cel art [Bottom left] When the boar god senses their presence, Jago and the hunters run out of the makeshift shelter. The stream [that they cross along the way = Background art [Top right] Inside the camouflaged shelter built on a mountain ledge = Background art [Middle right] The rock wall on the way to the shelter = Background art [Bottom right] Jago climbs down the rock wall, disguised in a bear skin = Cel art



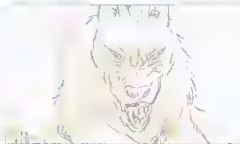
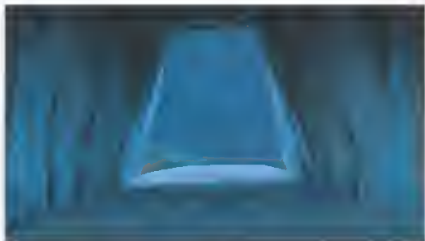
[Top] The boar gods ask Moro why the Forest Spirit did not save Nago, the boar-god-turned-demon - Cel art [Middle] After learning that the Forest Spirit healed Ashitaka, the boar gods become enraged and grow suspicious of the Forest Spirit and the Moro wolf clan. When the confrontation reaches a boiling point, Ashitaka confesses that he killed Nago. San and the boar gods look down at Ashitaka on the ground - Story sketch [Bottom] San and the boar gods - Concept sketch

[Top] When Ashitaka holds up his arm as proof of his sin, San stares at the scar, which has spread to his hand, while Moro narrows her eyes - Cel art [Middle] Ashitaka reveals that he killed the demon in order to save his village - Story sketch [Bottom] Lord Okoto comes forward. The most ancient of the boar gods, 500 years old, has four tusks. San steps in his path, believing that Okoto is about to eat Ashitaka. When the warner asks if there is a way to lift Nago's curse, Okoto tells him to "leave the forest" - Cel art

Moro's Cave

Ashiloka sleeps in Moro's cave and is awakened by a pain in his right arm. He goes out to the ledge and takes in the forest below. The ledge where Ashitaka stands = Background art





[Top left] The mouth of the cave leading out to the rock ledge = Background art [Middle left] As Ashitaka regains his strength the pain intensifies Moro refs Ashitaka standing at the ledge to jump to end his suffering = Cel art [Bottom left] "Why can't the humans and the forest live together?" Ashitaka asks "What's your plan, to let her (San) die with you?" When Moro sneers, Ashitaka shouts, "You must set her free!" Moro bares her fangs and growls "My poor, ugly, beautiful daughter is neither human nor wolf! How could you help her?" (Top) Ashitaka answers, "I don't know, but at least we might find a way to live" = Story sketch (Top and cel art [Right]) The rock ledge outside Moro's cave = Background art





[Top] A well trail covered with fallen leaves = Background art
 [Middle left] San sleeping soundly in Moro's cave = Cel art
 [Bottom left] At sunrise, Ashitaka notices his hood and sword set next to bundles of raptors—San's silent message to Ashitaka to leave the forest = Cel art [Middle right] Ashtaka rides Yakul down the animal trail way of the kodama's absence and the still silence of the forest = Cel art [Bottom right] Ashitaka traverses over the rocky, dried riverbed and sniffs the scent of the networks in the air = Cel art

The Clash Between Humanity and the Forest Gods

The time for the final battle has come. The gruesome clash between San and the vengeful boar gods versus Eboshi and the humans exacts heavy tolls from both sides. Lord Okkoto is shot, turning him into a demon, and swallows San into his tendrils. Ashitaka risks his life to find San and save her. Meanwhile, Jigo and Eboshi join forces to cut off the head of the Forest Spirit. The story races toward a chaotic climax.

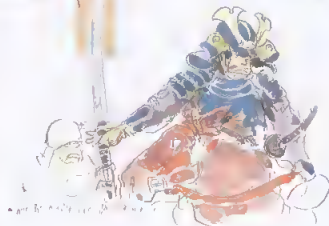


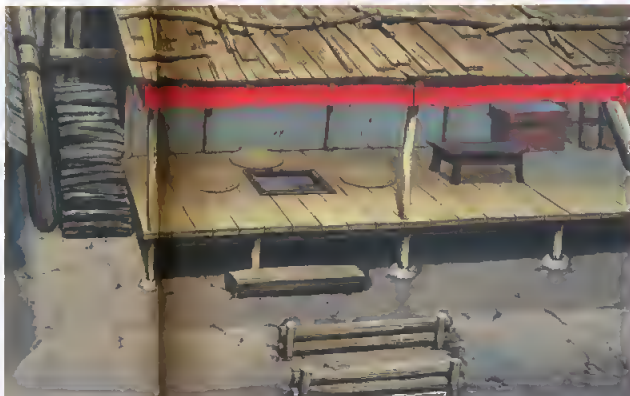
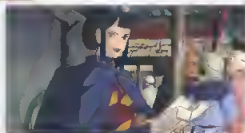
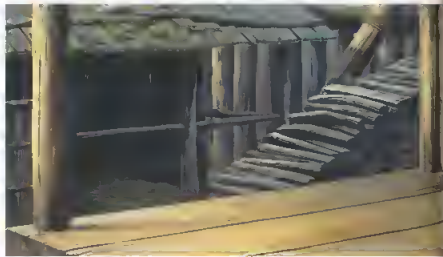
[Left] A kodama • Preliminary concept sketch [Right] The Nightwalker prowls the forest • Preliminary concept sketch

The Final Battle Begins

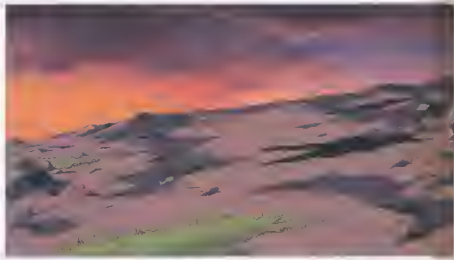


(Top left) Iron Town waits for Lady Eboshi's return
(Bottom left) As Eboshi and her men march back
to Iron Town, they are attacked by local samurai.
Vermilion banners draped from the towers to repel
arrows = Cel art (Top right) The barren mountain
road by which Eboshi's men retreat and return to
Iron Town = Background (Bottom right) A samurai =
Preliminary concept sketches





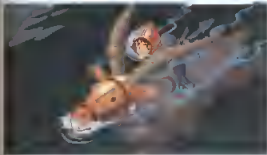
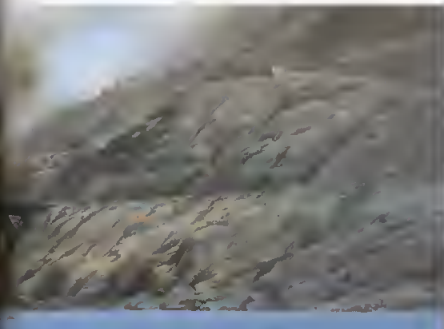
[Top left] The porch of the guardhouse « Background art [Bottom left] Lord Asano incites the samurai to attack Eboshi's men and plots to seize the iron from the town. The Tataru women turn away Lord Asano's messenger at the gate « Cel art [Top right] At the guardhouse porch, Jigo shows the Emperor's note to Lady Eboshi. Jigo advises Eboshi to recruit hunters and deliver the head of the Forest Spirit to the Emperor « Cel art [Middle right] Lady Eboshi is promised the support of the Emperor's mysterious rifle corps. Unlike Jigo, Lady Eboshi does not believe the Forest Spirit's head possesses the power to grant immortality, but promises to aid him « Cel art [Bottom right] The guardhouse in Iron Town « Background art



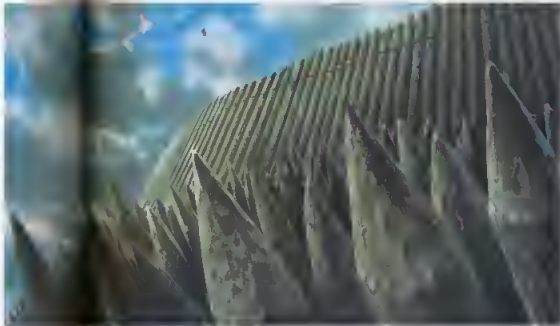
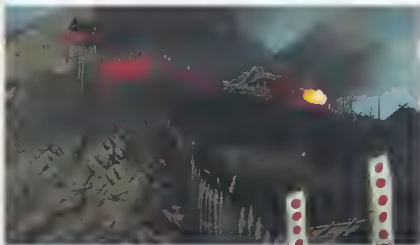
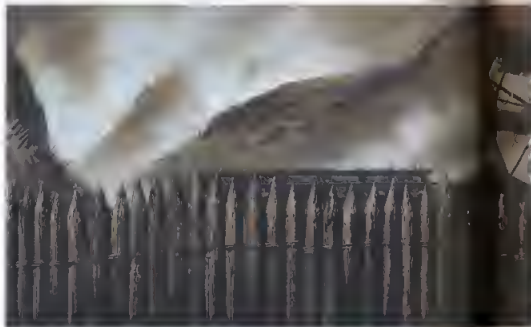
(Top left) The slope down which Jigo's umbrella gang and the hunters march at twilight = Background art (Middle left) Hunters wearing bear and bison skins head for Iron Town = Cel art (Bottom left) Jigo's men sit in a circle and fill their stomachs amid the suspicious looks of the falata = Cel art (Top right) Hunters = Preliminary concept sketches (Bottom right) The inside of the gate through which the hunters file in = Background art



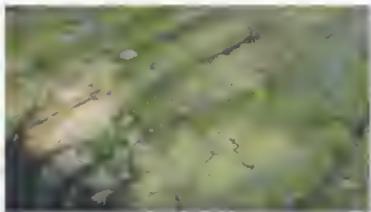
Two Battlegrounds



[Top] The lake that Ashitaka and Yagoromo swim across after sensing trouble in Iron Town. Ominous clouds hang over the hills near the town - Background art [Bottom right] Ashitaka reaches the lakeside opposite town. He clashes with samurai and jumps into the lake - Cel art [Bottom right] Ashitaka and Yagoromo hurry toward Iron Town - Cel art

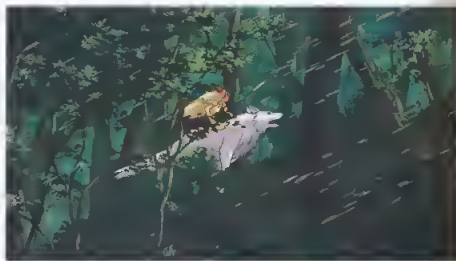


(Top left) After Lady Eboshi and her men depart to hunt down the Forest Spirit, Lord Asano's samurai attack Iron Town. The stockade is singed from gunfire = Background art (Middle left) The Tataru women defend the raw stockade. Toku (right) spots Ashitaka swimming across the lake = Cel art (Bottom left) The Tataru lean out of the gun port and fire upon Lord Asano's boats = Cel art (Top right) Dead bodies lay about the destroyed gate = Background art (Bottom right) The stockade in the rear of Iron Town = Background art

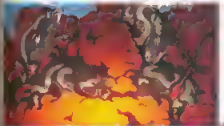


[Top left] Lady Eboshi and her men prepare for battle against the rampaging gods, unaware of the Asano forces' attack on Iron Town. The riflemen send smoke into the forest to dampen the animals' sense of smell = Cel art
[Bottom left] The edge of the mountain from which Eboshi's men send smoke into the forest below = Background art [Top right] The mountain face = Background art [Bottom right] Lady Eboshi's forces open their umbrellas and make camp on the mountain = Cel art





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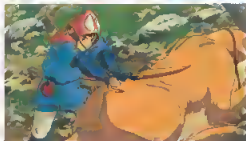
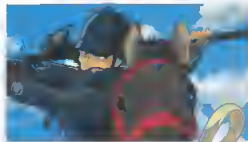


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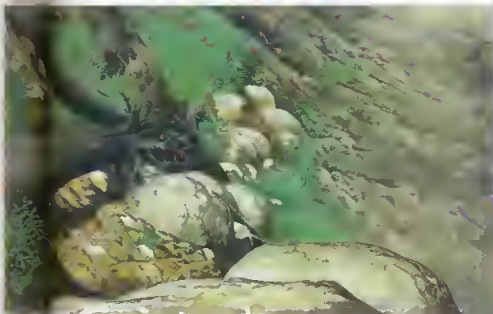
[Top] San races through the dark forest to join Moro, watching the Eboshi forces' movements = Cel art [Bottom] 1. San and Moro realize that Eboshi has set a trap to lure the boar gods out of the forest. San decides to fight alongside the boar gods and says goodbye to Moro. 2. A wolf gives Ashitaka's stone dagger to San. Moro says she will go to the Forest Spirit and bids her wolf children to stay with San. 3. San ties Ashitaka's stone dagger around her neck and sets off = Cel art

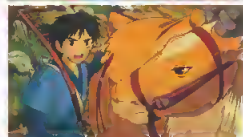
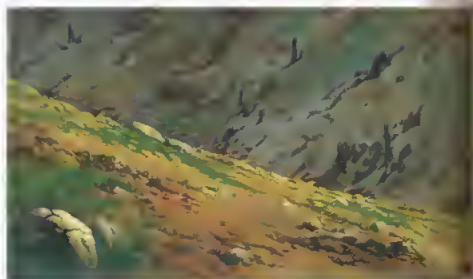
[Top] The boar tribe charges toward Eboshi's camp. San declares, "The Moro tribe has come to fight with you," and joins the rampaging herd = Cel art [Bottom] 4. The boar gods are blown away by the traps set around camp. 5. San, the wolves, and the boar gods continue their charge through the explosion. The stone dagger that Ashitaka gave San hangs from her neck. 6. Eboshi stands coldly amid the smoke and thunder = Cel art [6. is CG image]

Ashitaka Rides into Battle



[Top left] Ashitaka rides to the battlefield to alert Eboshi about the attack on Iron Town when Lord Asano's men appear atop a bluff — Cel art [Middle left] The cavalymen relentlessly pursue Ashitaka — Cel art [Bottom left] Ashitaka urges Yakul into a gallop — Cel art [Top right] Ashitaka is thrown off the wounded elk and a cavalymen attacks — Cel art [Middle right] Ashitaka pulls the arrow out of Yakul writhing in pain — Cel art [Bottom right] The cliff bottom to which Ashitaka runs to escape his pursuers — Background art



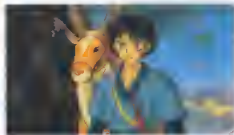
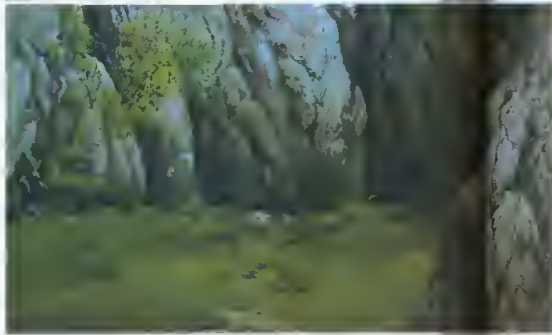


(Top left) The hill where Ashtaka confronts his pursuers = Background art (Bottom left) 1 A cavalierman advises Ashtaka standing his ground 2 The two blades clash 3 Ashtaka cuts off the cavalierman's arm with one swing 4, The cavalierman's long sword sticks in the ground = Story sketches (Top right) The dry streambed into which Ashtaka runs after telling Yakul to stay behind = Background art (Middle right) Ashtaka tells one cavalierman and catches an arrow with his bare hand = Cel art (Bottom right) Ashtaka is concerned for the injured Yakul = Cel art

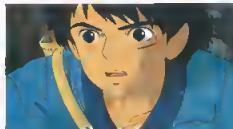
The Bloodbath



The mountain-turned-battleground reveals the fierce fighting that took place — Background art



[Top left] A dead boar hangs off the cliff edge blackened by fire and blood = Background art [Bottom left] The base of the mountain before battle = Background art [Top right] Ashitaka happens upon the gruesome sight = Cel art [Middle right] Ashitaka walks past the dead boars and is shocked to see the rows of human bodies laid out for burial = Cel art [Bottom right] The Tataru survivors recount what happened; the ox drivers were used as live bait to draw the boars in = Cel art



1



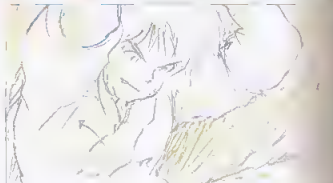
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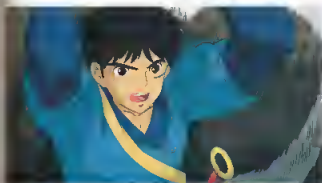
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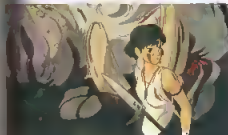
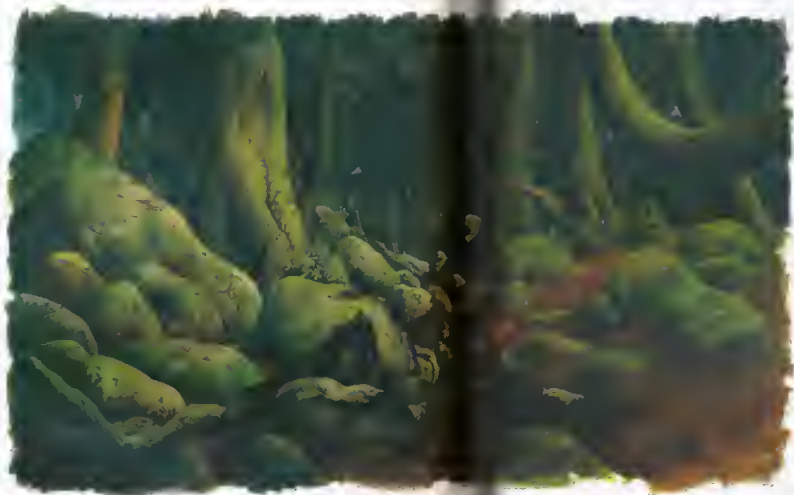
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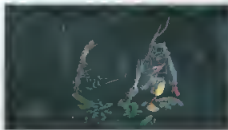
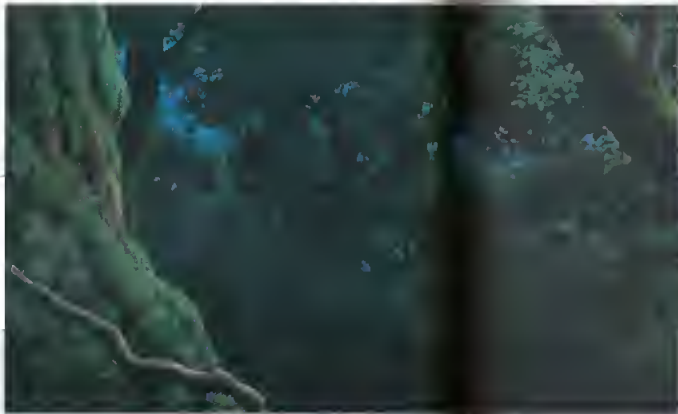
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[From top left] 1 Ashtaka learns of the tragedy and is overcome with sorrow for San, the boar gods, the Tatara, and Eboshi. Then, he notices something—a dying wolf—among the carnage. 2 Ashtaka tries to save the wolf trapped beneath the pile of boar corpses. 3 The wolf struggles to wriggle free. 4-6 Ashtaka tries to lift the boar corpses with all his might. 7 The Tatara do not know what to make of Ashtaka trying to save the wolf. Ashtaka asks, "What's more important to all of you? The head of the Forest Spirit or saving your town?" 8 The umbrella gang pushes the Tatara aside and comes forward. When one man shoots poison darts hidden in his umbrella at Ashtaka, the Tatara come to the warrior's aid. Col art (5-8) + story sketches

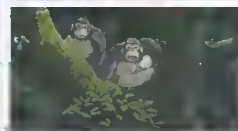
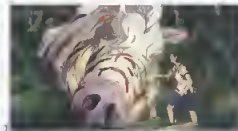
The Bloodstained Forest



[Top] The forest stained by the blood spilling from the wolf's and Akoto's wounds sustained in the battle against Eboshi = Background art [Bottom left] San's wolf brother has also been gravely wounded = Cel art [Bottom right] San urges the bear god onward and guides him to the pool of the Forest Spirit = Cel art



(Top left) The forest into which the Eboshi and Jigo lead the rlin corps and amoroello gang after the head of the Forest Spirit – Background art (Bottom left) A hunter returns and informs Jigo that Okkoto and San are heading for the pool of the Forest Spirit (left) Eboshi stands on a tree root and studies a map, while Jigo urges the troops forward – Cel art (From top right) 1. San encourages Okkoto who has slipped and fallen. 2. San and her wolf-brother grow uneasy. 3. The desperate apes throw branches at San and shout, "Because of you, the forest will die!" The apes sense something—the "ghost" boars—coming and flee. 4. San realizes the ghosts are humans disguised in boar skins and sends her wolf-brother to tell Moro. Believing the boars have returned from the dead, Okkoto cries, "Forward my warriors!" and leads them toward the pool of the Forest Spirit—a sign that Okkoto is turning into a demon. Okkoto collapses and the "ghost" boars instantly surround him. San risks her life fending them off. 5. The herd draws closer with black, vacant eyes – Cel art



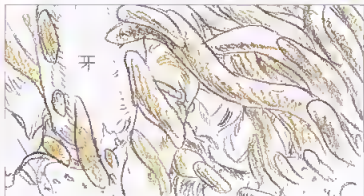
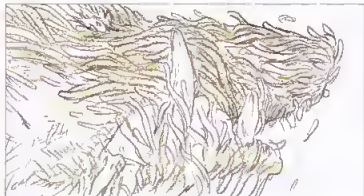
San and Ashitaka Reunite

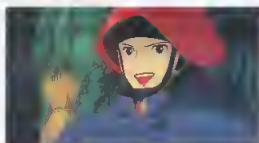
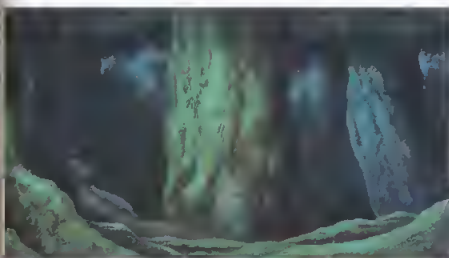
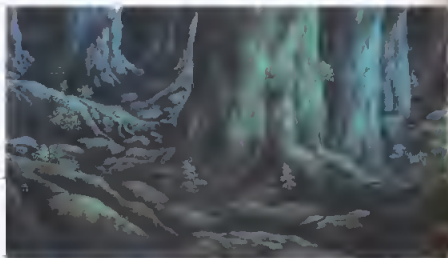
[Top] The cliff edge from which Ashitaka and the wolf look out over the forest in search of San = Background art [Bottom] The wolf howls at the twilight sky to send a message to San = Cel art.





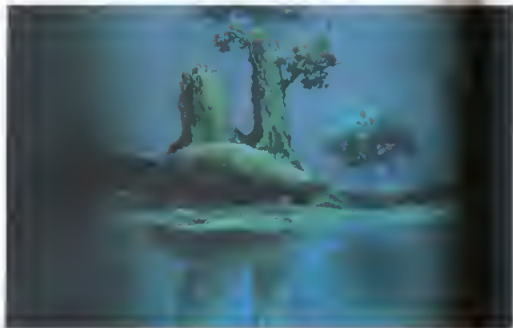
[Top left] Oikoto transforms into a demon before San's eyes. = Cel art [Middle left] The tendrils leeching on Oikoto burn the earth. The frightened ghost boars inch away from Oikoto. = Cel art [Bottom left] San is knocked unconscious by a stone from a hunter's slingshot and is swallowed up inside the tendrils. = Cel art [Top right] Tendrils cover Oikoto writhing with hatred. = Story sketch [Middle right] San binged inside the landrills. = Story sketch [Bottom right] San awakens and struggles to break free. Tendrils grow out of San's body as she herself begins to turn into a demon. = Story sketch



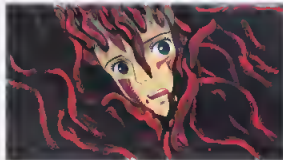


[Top] Near the pool of the Forest Spirit where Ashitaka encounters Lady Eboshi = Background art [Middle, bottom] Surprised by Ashitaka's sudden appearance, the troops break ranks. The men are transporting an iron box = CG image [Bottom] Ashitaka dodges concentrated gunfire and charges at Lady Eboshi. Eboshi realizes the warrior calling her name is Ashitaka. Jigo orders the rōmies to hold their fire = Cel art

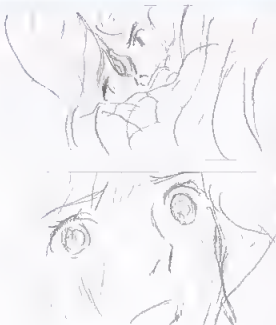
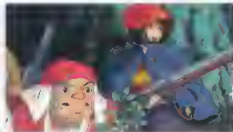
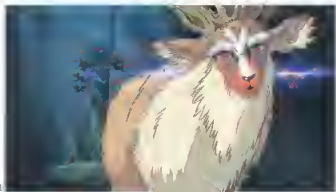
[Top] Near the pool of the Forest Spirit where Ashitaka confronts Eboshi = Background art [Middle, bottom] Eboshi learns that Iron Town is under attack by Asano forces. She asks, "What proof is there this isn't a lie?" to which Ashitaka answers, "None," and adds, "If I could I would have stayed back and defended the town." "So it's don't kill the forest gods. Now you want us to kill samurai instead," Eboshi sneers. Ashitaka answers, "No, what I want is for humans and the forest to live in peace!" and runs to save San



[Top] The island of the Forest Spirit, bathed in the lingering sunlight filtering in through the hole in the canopy = Background art (Bottom) Ashitaka wades into the pool and discovers Moro dying on the shore = Cel art



[Top right, middle right] Ashitaka calls out to San. Hearing him, San struggles inside Okkoto's tendrils and calls Ashitaka's name = Cel art [Bottom right] Ashitaka holds his ground against Okkoto and the ghost boars (top). He discovers San's leg inside the black Hanayake tendrils covering Okkoto and tries to bat them away = Story sketches

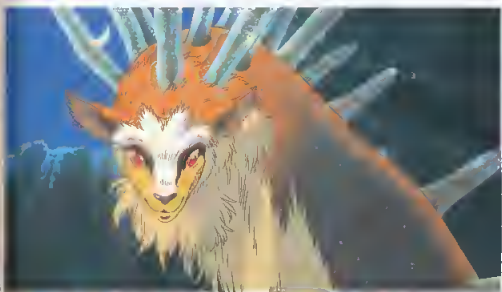


[Top left] Ashitaka dives into the tendrils to save San. The two wolves attack the ghost bears. Amid the chaos, Moro confronts Okkoto and snarls, "Give me back my daughter, demon!" Eboshi and Jigo, who'd been hiding nearby, spot the Forest Spirit on the island - Cel art [Middle left] Ashitaka and San reunite inside the tangle of tendrils - Story sketch [Bottom left] San realizes that Ashitaka has come to rescue her and calls his name. With one shake of his head, Okkoto sends Ashitaka flying into the pool - Story sketch [From top right] 1. Eboshi's bullet pierces the head of the Forest Spirit. 2. After Moro saves San, the Forest Spirit takes the life of Lord Okkoto. Eboshi and Jigo witness the Forest Spirit transform into the Nightwalker in the moonlight. 3. Ashitaka takes San in his arms and dives into the pool. The black tendrils drift away from San's body. 4. Ashitaka surfaces and watches the Forest Spirit's neck stretch up toward the heavens - Cel art

The Dying Forest



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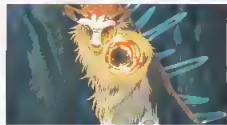
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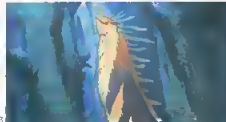
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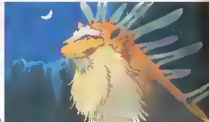
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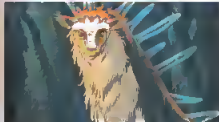
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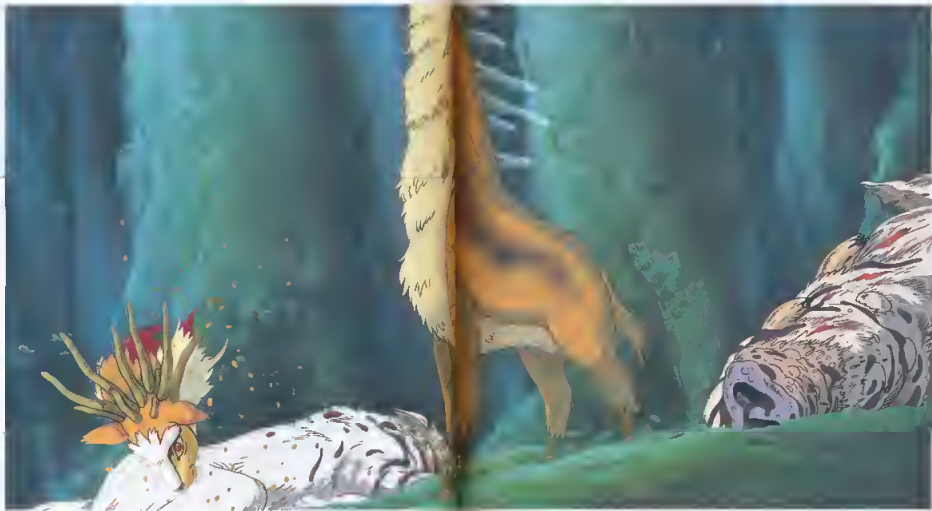


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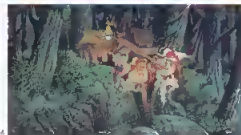
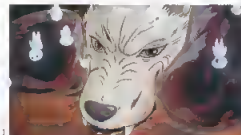


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[From top left] 1. The Forest Spirit transforms into the Nightwalker before Eboshi's eyes. 2. Its neck grows longer. 3. Ashtaka comes back up to the water's surface and looks on. The transformation is nearly complete. 4. Its neck continues to stretch upward toward the moon. 5. The Forest Spirit notices Eboshi taking aim with her rifle. 6. The Forest Spirit fixes its eyes on Eboshi. 7. The Forest Spirit stands with a smile on its face. 8. Undaunted, Eboshi aims her rifle and pulls the trigger. The Forest Spirit's expression remains unchanged. 9. The bullet hits the Forest Spirit in the neck. 10. Sparks fly as the Forest Spirit's head is blown off — CG images.



[Top] The Forest Spirit's head rolls on the ground where Moro and Diketo lie = CG image [Bottom left] Jigo and the men cheer and scramble to retrieve the head, as black ooze flows out of the headless body of the Forest Spirit. The ooze explodes into gooey rods that sweep over the humans = CG image [Bottom right] The rods turn into gooey spheres, which cling to the tree branches, killing them. The kodomo fall from the trees = CG image



[Top left] The spheres converge and the headless Nightwalker grows larger » Cel art [Bottom left] The Nightwalker rises up toward the moon. The black core covers the night sky, sending phosphorescent tendrils down into the forest. In search of the Forest Spirit's stolen head » CG image [From top right] 1. Amid the black squirrels laying waste to anything they touch, Moro's decapitated head approaches Lady Eboshi. 2. Eboshi's arm is bitten off by Moro. 3. Ashitaka lends to Eboshi's injury. Overcome with sorrow and anger, San stabs Ashitaka in the chest with the stone dagger. Bearing the pain, the warrior takes San in his arms. 4. Jigo and the men carry the box containing the Forest Spirit's head and run for their lives » Cel art [4 » CG image]

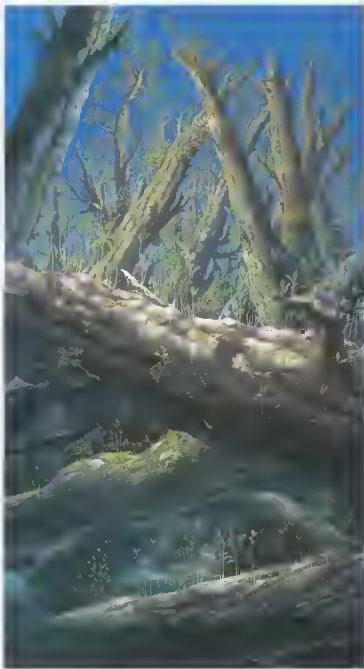
The End of Chaos



[Top left] The Nightwalker descends upon Iron Town and the battle between the Tabara and Ajami's samurai. Toki and the others escape into the lake.
 = CG image [Middle left] Iron Town in flames = CG image [Bottom left] The Nightwalker reclaims its head and collapses into the lake as the sun rises = CG image [Top right] Ashitaka and San chase after Jago to retrieve the Forest Spirit's head = CG image [Middle right] Ashitaka and San engage Jago and his men when the Nightwalker attacks = CG image [Bottom right] Ashitaka and San hold up the head toward the Nightwalker = Cel art



[Top] With the Nightbeast gone, the flowers grow and the hills turn green again. Ashitaka reassures San that the Forest Spirit is not dead: "He's like itself." San tells Ashitaka in parting, "You mean so much to me, but I can't forgive the humans for what they've done." Ashitaka answers, "I understand. You'll live in the forest and I'll go help them rebuild Iron Town." — Cel art [Bottom left] Ashitaka notices the scar on his right arm is gone—a sign from the Forest Spirit bidding Ashitaka to live — Cel art [Bottom right] Ashitaka tells San, "Yaké and I will come and visit you," to which San nods. — Cel art [P156] New plants sprout out of the giant trees — Background art



CG

All About Digital Imaging



Although Ghibli has selectively used CG in the past, *Princess Mononoke* marks the first time the studio has implemented and used digital technology down to the smallest detail. How were the CG images created? This chapter outlines the digital imaging process, based on conversations with the CG staff.

I Three-Dimensional Expression Made Possible by CG

Integrating CG Without Looking Like CG

Studio Ghibli's department called the CG room was in charge of inserting the CGs in *Princess Mononoke*. Although digital imaging is, without a doubt, a collaborative process involving the photographer, color design, ink and paint, and special effects departments, the interface is low with CG director Yoshinori Sugano will serve as a primary for the overall process.

Yoshinori Sugano began his career at Nippon Television in 1980, where after working in news programming, he joined the company's CG room as a staff development. Sugano provided CG effects on *Pon-Pon* (the library's new *Whisper of the Heart*), and then was loaned out to Ghibli's offshoot of the CG room on *Princess Mononoke*.

What brought so a staff of two expanded to include animator Yoshiyuki Morimoto, Mitsunori Katamori, Masao Inoue, and digital ink and paint artist Hiroaki Ishikawa. It will be two but computers, twenty-nine digital computers, twenty-nine scanners and printers. The Photographs Department also has computers for compositing, and video editing on Image-a to handle the film recording. Ghibli is capable of handling most in-house.

Princess Mononoke is Ghibli's first attempt to incorporate CG and digital technology. Also, did Sugano and the staff worked on the challenges, but they encounter along the way?

Sugano: Miyazaki first approved it for us to see what a 3D model looks like. I wanted to make a computer-generated image of a character with 3DCG. The character was, I think, the biggest challenge because creating a 3DCG image made the character look extremely stiff.

While CG can make nature's character look like a plastic doll in the case of a hand-painted character, the character and the scene can be painted in entirely different colors. In fact, no program that could replace the look of a hand-drawn character even existed.

Sugano: An animated film made entirely from CG would look like a 3D story. But Miyazaki's aim was to integrate CG images into the animation organically, so we had to develop the software from scratch. So we approached Animate in the States to develop a program that would maintain the same as hand-painted ink and precise contour lines.

Then through the collaboration of a network system company, Lion Studio was born and used to connect Princess Mononoke. At the same time, CG room was equipped with high performance Silicon Graphics computers and software from Apple Technology and from various makers in the United States, Britain, and Canada. At first, the core idea of using CG in the same way as a hand-drawn scene to be a contribution.

Sugano: Given the possibilities of CG, it's perfectly fine to showcase the technology in a flashy way, but our goal was to put the technology into the CG room, not to put it into the CG room. We wanted the computer-generated images to blend naturally into the 2D animation while plotting the full three-dimensionality that only CG can create. That was Miyazaki's direct intention, after all. His idea of using CG was really about accentuating the hand-drawn look.

Then what is really the things that only CG can create?

Sugano: For many things, a sense of depth or spatial expansiveness. For example, for a scene when Ashitaka is riding atop Yuki, by digitally mapping a three-dimensional space and creating the effect of moving the camera, we created an even more realistic sense of speed and three-dimensionality. We can make an animated character with the same kind of motion as a real person galloping across an open field. The fact is still mainly composed of hand-drawn cells, of course, but CG and digital techniques made it possible to manipulate and compose shots in ways that would have been impossible with traditional shooting methods alone. The possibilities of expression have expanded greatly.

In addition, for a two-dimensional image such as a character's expression and ink and paint in a 3D scene, we can use a computer screen. According to Sugano, the digital technology employed in Princess Mononoke can be applied to other subjects. CG, digital compositing, and digital ink and paint. CG was used mainly to create three-dimensional images or to digitize the image and use as background art.

Sugano: People typically think of CG as creating a three-dimensional object and moving it. Essential to this process are mapping techniques and the patching system. In both cases, you begin by creating a wire-frame model and adding various effects and color to it.

CG (Computer Graphics)



Mapping



An example of mapping technology used in shot 1102. It is a three-dimensional image model created by calculating coordinates and the speed and distance of the camera. 10 is the ball that will appear in the foreground. 11 is the background art of the image. 12 is the final finished image where 10 is reflected in 11 and superimposed on the top of 11. When the ball is reflected, the ball appears out of the background as the camera is looking forward.

Software Used in Princess Mononoke

- SOFTWARE: 3D Software: 3D Studio VIZ 3.0 (3D rendering software) 3D Studio VIZ 3.0 (3D rendering software) 3D Studio VIZ 3.0 (3D rendering software)
- HARDWARE: 3D Studio VIZ 3.0 (3D rendering software) 3D Studio VIZ 3.0 (3D rendering software) 3D Studio VIZ 3.0 (3D rendering software)
- SOFTWARE: 3D Studio VIZ 3.0 (3D rendering software) 3D Studio VIZ 3.0 (3D rendering software) 3D Studio VIZ 3.0 (3D rendering software)
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The composite shot of the demon spirit's tentacles swirling around Nigbawke's nose on p.169 is a point-to-point example of how smoothly the computer-generated images look and how Tony Shaver is used to give it the hand-painted texture of hand-drawn illustrations. This is the distinguishing feature of the CG images created for this film. Then how exactly does mapping work?

Sequence: First we computer-generated a 3D wire-frame tentacle model, covering the background art on top of it, and then a semi-transparent plane between the background art and camera, and overlay the color of trees and people on top of that. Then you move the camera to create a sense of movement—that's mapping. All of the backgrounds and people are hand-drawn on cels, while all the stuff that gives the shot a sense of movement is computer-generated. In this way, we can retain that atmospheric depth and spatial responsiveness.

Furthermore: artists employed the patchwork system technique on 3D CG images for Princess Minamoto (see p. 171). The patchwork system is a technique used to create thousands of light particles in space and render them to look like living creatures, or to create great flow effects.

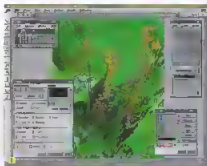
Sequence: Even with 3D CG, today's computers just don't have the processing power to calculate and render movements of a large 3D object. But they're capable of generating thousands and thousands of tiny particles. By moving these particles in accordance with various wind and gravity conditions, you can animate a sort of "bubbles" blowing out of the Nightwalker's body extremely easily.

CG can also be used for image processing, and one technique is called *morphing*. By morphing one series of images over the next, you can render a passage of time and transformations seamlessly.

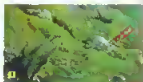
This series of the demon spirit's wings gradually melting away shown on p. 171 is an example of morphing. As the flesh slowly melts away and the creature grows more menacing, you can see how the texture also changes. Even in the end product of such techniques can be seen as seamless scenes throughout the film, it doesn't read alone.

Sequence 1: The two remaining digital technologies used in the film, digital compositing is an area that usually involves the Photography Department. Whereas digital compositing was used to manipulate the look of the aforementioned 3D CG images, digital compositing involves combining the hand-drawn key frames and backgrounds into the computer and compositing the various elements into a single image and is a computer-dependent form of traditional optical photography. The entire is digital and, of course, that makes reducing the risk by desktop, a task that the ink-and-paper staff traditionally mastered by hand.

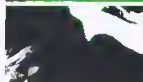
● Morphing



Morphing technology used in *Legend* (1987) (lower left) and in the film *1* is the desktop displaying an image of a painting sheet. The sheets are programmed to grow along the yellow dotted lines. The wire-frame models in 2 and 3 represent how the three sheets will gradually grow into

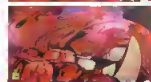


4 & 6 are the completed images of the demon work. Sheets spread out and fit the base of the tentacle shape.



Another example of morphing from *Legend* (1987). New vegetation sprouts to him in 7 and 8. 5 and 10 are background images of growing grass in *Legend* (1987). 11 and 12 are masking sheets used to render the appearance of grass spreading from front to back.

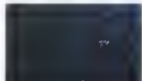
13-15 below are images of the demon spirit melting away from *Legend* (1987). The in-between frames that connect these three images were created digitally and superimposed.



● Particle System



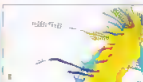
An example of the particle system used in *Legend* (1987). It is simulating particles swirling from the Nightwalker's 2 arms without effects (color, brightness, etc.) so the particles blend with the Nightwalker's body.



3 & 4 are the final light particles created with a software program. The artist inputs settings for wind, gravity, and velocity, and the particles are programmed to disperse like water bubbles. At right, the particles are blended.

5 The particles are composited over the Nightwalker using the software at 2.

At right, the finished composite image after the particles are blended with the Nightwalker's body.



3-7 Compositing particles over the Nightwalker's dorsal fin area. 5 is the original image. The flow of the particles is set at 6. 7 is the completed image.

Compositing Countless Layers

In theory, digital compositing has the advantage of being able to combine lots of cutouts of elements into one image (see p. 175). Studio Ghibli has employed digital compositing as far back as *Whisper of the Heart*. In the *first* series with *Arrietty*, *Spirited Away*, and the *Bones*, for example, about two separate elements including backgrounds, clouds, and characters were composited digitally, and the shots were saved separately at different speeds. On *Princess Mononoke*, the Photography Department, led by Masahito Goto, captured the digital composite work. A technician who has worked on numerous animated films in the past, Goto has served as director of photography on every Ghibli film since *Porco Rosso*.

Goto: We asked another company to handle the digital effects for *Whisper of the Heart*, and our job wasn't until it came from digital compositing. We determined some in-between images, photographed each part separately, scanned the images into the computer, and assembled the parts into a single image on the computer screen, so the process was essentially the same as optical compositing, although our parts are more working with wire images. The only difference is that we didn't have to make the masks ourselves.

In optical compositing, it's necessary to make both the positive mask cut on the edge of a certain character and the negative mask of its face including the character. (1) First the positive mask of the character had on top of the background. (2) Then the film from then film the composite mask of the area including the character on top of the character cut. (3) Then it composite image of the character inserted into the background cut is complete.

Many films currently seen in animation and 3D films employ making techniques and multiple exposure compositing.

Goto: That process is basically the same for animated and live-action films. The job of the Photography Department is to transfer the moving background and characters in real masking materials into film.

In digital, the various elements are shot on a single-color background and transferred to digital data, after which the results are combined by computer. Thus digital compositing eliminates accidents such as masks slipping out of alignment, producing a higher-quality image. There are other advantages, such as that once the various elements are digitized, shot color and picture quality will never degrade from repeated use, and camera effects can be added after and relatively easily.

Goto: This is the first time we've actually sat in front of a desktop ourselves, and I can say that working with all of the materials and managing others has been our film career. As long as we pay extra care in transferring the data and background into digital data. Goto: On *Princess Mononoke* was shot on film in

the traditional way. The digitally created elements have to be inserted into the shot and film edited separately, such that the final shot scene, color matching has become a cruel of hour.

The decision to implement digital technology was made based on the data collected from numerous color tests during the pre-production phase. This method allows us to utilize the technology of producing natural-looking digital work in this film.

Goto: But the biggest change is that we're now able to work more collaboratively with the CG team and other departments inside Ghibli. With a we need in particular digital effect that our the existing software can provide, we can consult with the in-house programmers to see if they can create something for us. In the past, when we've had to outsource the digital work, the outcome was really out of our hands once we created the separate elements and handed them over to the contracting company. Now we're able to see the work through to the end ourselves. I'm both glad and grateful to be able to go over in our work and we're doing things with the camera.

Despite the usual deadline pressures, going digital has also afforded more time to make elaborate visual concepts, and at the same time, increased the volume of data.

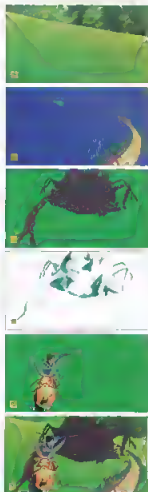
Goto: Some times, we've ended up using some thing that came from Microsoft, approaching us and asking us to try it digitally. One example is the smoke effect in the fire and bank scenes. Since film captures an image when it's exposed to light, you can't overlay like a smoke on top of a background image via multiple exposures. In the past, we would have to render that smoke effect by hand-drawing or traditional ink and paint, but on this film, we shot images of white smoke, and then in the composite the digitally reversed negatives, I think we were able to capture that realistic texture of thick smoke as a result.

Goto believes implementing computers has not only proven labor saving and efficient, but also expanded the possibilities of visual expression.

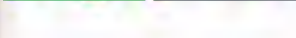
Goto: Digital images can appear "out of place" on occasion, but we should be able to exploit digital technology to render a more natural look. Given how the game industry and commercials are already saturated with CG images, there's nothing wrong with using digital to extend digital qualities. But as the animation industry progresses toward digitalization, I worry that film photography will cease to exist as a career. In that sense, *Princess Mononoke* may well be the last traditionally shot animated feature we work on. Aside from the work we put into implementing computer technology, we've poured every last bit of our know-how into this film, so *Princess Mononoke* will represent the culmination of traditional film photography.



Multilayer Compositing



[Shot 68] is an example of multilayer compositing. The various layers of frame negatives, smoke and fire in 1-10 are composited digitally to achieve 11.



Digitally Removing the Digital Qualities

Digital ink and paint refers to the task of coloring the animation via computer. At present, the manufacture of paints and color animation is an continuous decline, and the number of ink-and-paint artists is decreasing. Much of the CG (computer graphics) industry has already switched over to digital, and given its numerous technological merits, along with the changing marketplace, it seems likely that the Japanese industry will follow suit. Studio Ghibli underwent its own digital ink and paint for the first time on Princess Mononoke, with Hayao Miyazaki supervising.

Isih: I joined the Ghibli staff as a traditional ink-and-paint artist, so this was my first time trying to computerize the job, much less digital ink and paint. But the nature of the job itself is essentially the same: what if it's done on cells or on the computer.

It: In the traditional sense, ink and paint literally involve painting the images that have been traced onto cels, but the animation process before that involves the same even when the implementation of digital ink and paint.

Isih: Typically the cels are sent to the ink-and-paint staff to be colored, but the shots requiring digital work are scanned and painted by computer. After the shots have been digitally painted, they undergo some kind of digital cleanup on a hi-face in an analog room to look

The benefit of working digitally is the sheer breakdown of color—16,778,000 of them—at the artist's disposal. It makes possible nearly an infinite variation of colors and the creation of colors that might not be available in certain paints.

Isih: Not that we really need as many colors to begin with. Last Ghibli film has an established color scheme, so *Princess Mononoke* was no different in that we took the color chart that a color designer Masahiro Yasuda devised for this film and worked from that.

How just what are the merits of working digitally? The first answer is efficiency.

Isih: For the shot of the dragon spirit moving across the field in the beginning of the film, for example, we painted the background of the grass digitally according to a video's speed; that is, in the same colors were used to paint the grass by hand. Thus the digitally painted backgrounds and hand-painted cels blended together naturally without our having to run color tests.

The working materials can also be computer generated, making them easier to manipulate with CG without the worry of color shifting out of place as another layer may begin to show through. Many of the shots in Princess Mononoke requiring CG effects, detailed working techniques, and composition of multiple art layers were created with digital ink and paint by

in 175]. There are other other merits such as eliminating unnecessary caused by the varying skills of the artists, the ability to cut and paste elements on screen, and the ease a job which could not be done with a mouse in graphics tablet. On the other hand, there are some demerits.

Isih: In a sense where only the character's face and hands are moving and each of its parts must be drawn on separate cels, typically we would have to run the frames of the still figure through the trace machine. Then we combine those cels with those that animate the facial expressions of the character and run it through the trace machine again to create the finished image. Since the frames are run through the trace machine again and again, none of the completed images turn out exactly the same. This is what gives a physically unprinted image a kind of human touch. In digital, however, we only need to create one image of the still figure that will remain static throughout the scene. But this facility creates a strange consciousness when the CG figure is combined with the hand-drawn characters. The character seems to lose its heart. We try to compensate for that by deliberately returning the body lines to look more hand-drawn and using digital effects to soften the outlines of digital. Of course, the power of CG is on full display when it comes to composing still objects.

As is often heard, digital ink and paint has the benefit of saving down supplies such as ink, paints, and other materials and reducing labor hours, but it isn't as simple as that.

Isih: Don't get me wrong, digital is a convenient and new method of expression and this gives as a result, but the more digital technology allows us to do, the more it distance ourselves from traditional Japanese animation as we see them. For example, we have very numbers of colors not on disposal, but if we don't adhere to traditional principles of assigning colors, the color are liable to be seen in distraction. So, I think it's still in how you use digital technology.

This digital technology has supported the film's production in three areas: 3D expression, machine compositing, and digital ink and paint. In closing, let's ask Sugano one last question: How far will digitalization in animation go?

Sugano: Out of 1,600 or so shots created by this film, roughly a hundred shots involved some kind of digital work. That's a pretty high number for a first effort, but I expect the percentage to grow to 100 percent in time. By using CG as bold ways, we might be able to develop different kinds of visual expressions from those of traditional animation. The CG on *Princess Mononoke* was meant to be something of an experiment, so it's crucial that we put this experience into use in the next project.

Studio Ghibli's challenge has only just begun.

quoted and written by "Shoichi Nakagawa"

Digital Ink & Paint

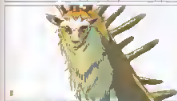


FIG 1-6 The images in 4-6 show the digital ink and paint process. The images are painted transparent and the image is complete (6).

Example of digital compositing from shot 4323. With the power of digital technology, an intricate image such as this one can easily be colored. The scanned image is then painted. The painted image is then composited over the background to achieve the final process. The entire process is done on a computer.

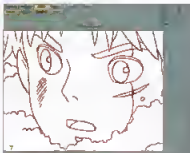
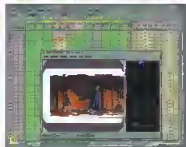
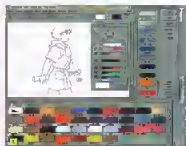


FIG 7 When the images are scanned, the artist can adjust the thickness of lines on the interface.

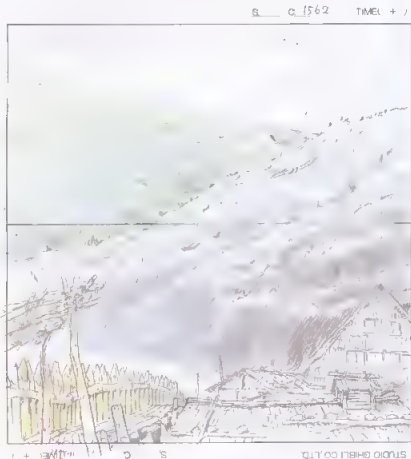


It: It's the "paint-the-donor" interface. The artist can save color assignments in the palette box below and use them in other scenes. It shows in between not being painted according to the character's movements. A timesheet can be created to calculate the running time as in 10.

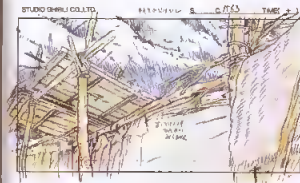
Hayao Miyazaki Layout Collection

Collected here are the layouts (a kind of blueprint with specific instructions regarding shot composition) Miyazaki created for the last sequence of the film. Although it is typically the job of key animators to draw the layouts based on the storyboards, Miyazaki drew the layouts himself due to some last-minute changes in the story.

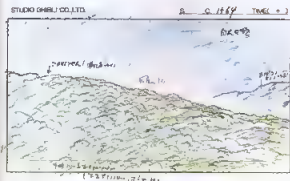
(Some shots feature two separate panels indicating instructions for character and background. Character sketches drawn by key animators have also been included.)



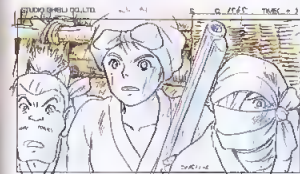
Shot 1562



Left: Shot 1563 (Background) Right: Shot 1563 (Character)



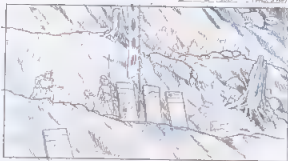
Shot 1564



Shot 1565

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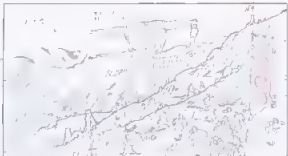
S. C. 146 TIME(3:16)



Shot 1566

STUDIO GHIBLI CO., LTD.

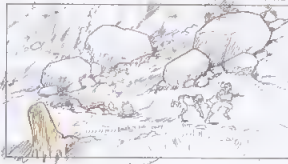
S. C. 1467 TIME(3:30)



Shot 1567

STUDIO GHIBLI CO., LTD.

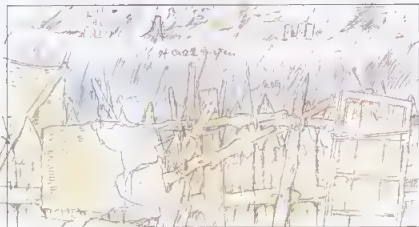
S. C. 1468 TIME(3:44)



Shot 1568

STUDIO GHIBLI CO., LTD.

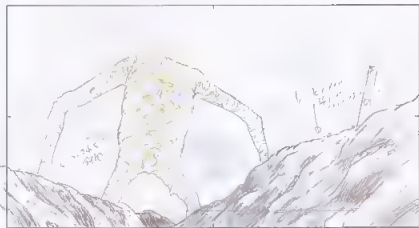
S. C. 147 TIME(3:47)



Shot 1569

STUDIO GHIBLI CO., LTD.

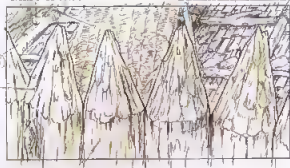
S. C. 1471 TIME(4:00)



Shot 1571

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S. G. 1578A-1578C + 3



Left: Shot 1570, 1578A, 1578C (Background) Right: Shot 1578A (Character)



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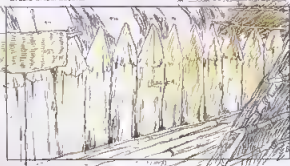
S. G. 1578B-1578C + 3



Shot 1578B

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S. G. 1578D-1578E + 3

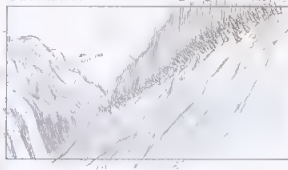


Shot E-1 (Extra Shot)

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F. 1513

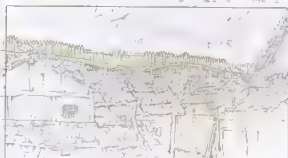
S. G. E-2-3 TAKE E-2



Shot E-2

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S. G. E-3 TAKE E-3



Shot E-3

STUDIO GHIBLI CO., LTD.

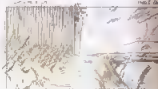
S. G. E-4 TAKE E-4



Shot E-4

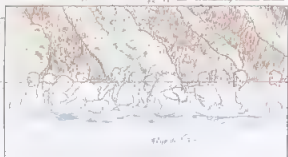
STUDIO GHIBLI CO.,LTD.

TIME(1:30)



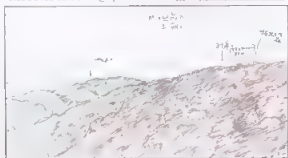
Left Shot E-6 (Character) Right Shot E-6 (Background)

STUDIO GHIBLI CO.,LTD. TIME(1:40)



Shot E-7

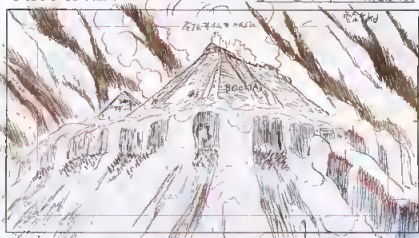
STUDIO GHIBLI CO.,LTD. TIME(1:50)



Shot E-8

STUDIO GHIBLI CO.,LTD.

TIME(1:50)



Shot E-9

STUDIO GHIBLI CO.,LTD.

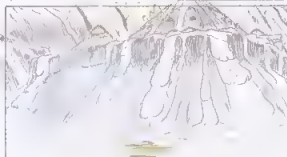
TIME(1:50)



Shot E-10

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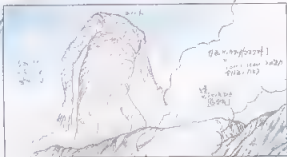
S. C. 11 TIME(1:40)



Shot E-11

STUDIO GHIBLI CO.,LTD.

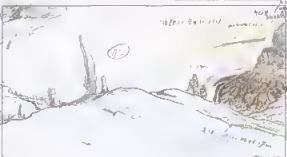
S. C. 12 TIME(2:01)



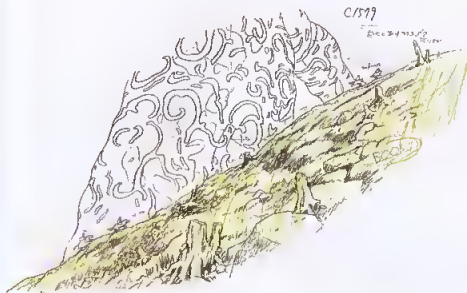
Shot E-12

STUDIO GHIBLI CO.,LTD.

S. C. 1130A TIME(3:00)



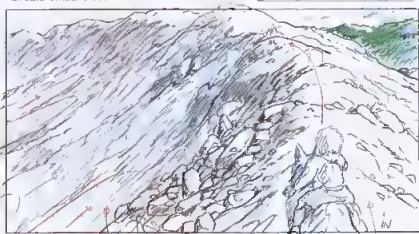
Shot 1580A



Shot 1579

STUDIO GHIBLI CO.,LTD.

S. C. 1130B TIME(3:40)



Shot 1580B

STUDIO GHIBLI CO., LTD.

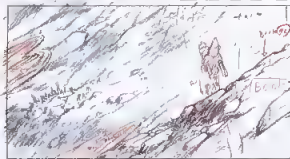
S. C. 117 TIME (+)



Shot 1581 (Character)

STUDIO GHIBLI CO., LTD.

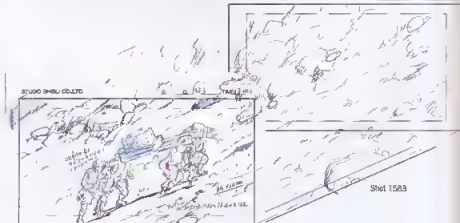
S. C. 112 TIME (+)



Shot 1582

STUDIO GHIBLI CO., LTD.

S. C. 113 TIME (+)



Shot 1583

STUDIO GHIBLI CO., LTD.

C. 117

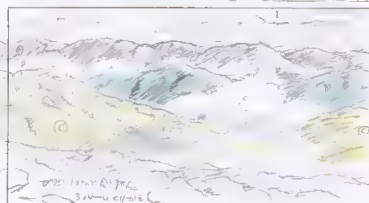
TIME (+)



Shot 1581 (Background)

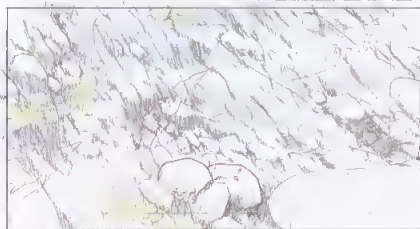
STUDIO GHIBLI CO., LTD.

S. C. 117 TIME (+)



STUDIO GHIBLI CO., LTD.

S. C. 1584 TIME (+)



Shot 1584

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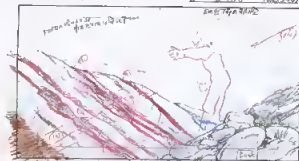
S C 1585 TIME: + 3



Shot 1585

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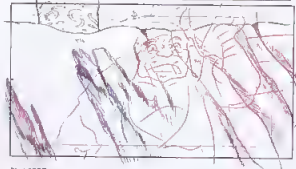
R C 1586 TIME: 1+0



Shot 1586

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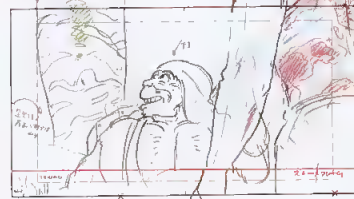
R C 1587 TIME: 6+0



Shot 1587

STUDIO GHIBLI CO., LTD.

S C 1589 TIME: + 3

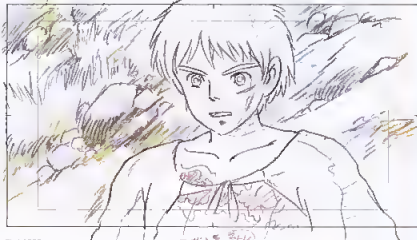


S C 1589 TIME: + 3

Shot 1589

STUDIO GHIBLI CO.,LTD.

S. C. 1588 TIME (+0)



Shot 1588

アサと風 (風)

STUDIO GHIBLI CO.,LTD.

S. C. 1590 TIME (+)



アサと風 (風)

Shot 1590

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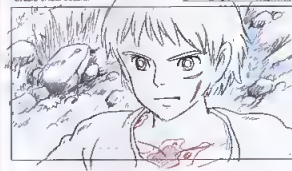
S. C. 1591 TIME (+)



Shot 1591, 1593

STUDIO GHIBLI CO.,LTD.

S. C. 1592 TIME (+)



Shot 1592

STUDIO GHIBLI CO.,LTD.

S. C. 1594 TIME (+)

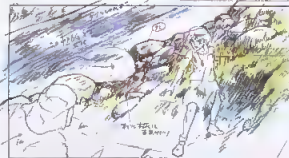


Shot 1594

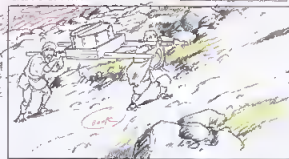


Shot 1596

1596 1596



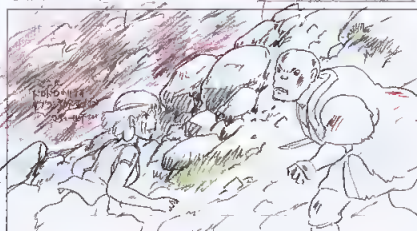
Shot 1597



Shot 1598



Shot 1599



Shot 1600

STUDIO GHIBLI CO., LTD.

30-2 30-2

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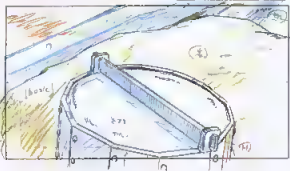


Shot 1612

30-2 30-2

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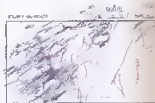
S. 0.1613 TIME: +3



Shot 1613

STUDIO GHIBLI CO., LTD.

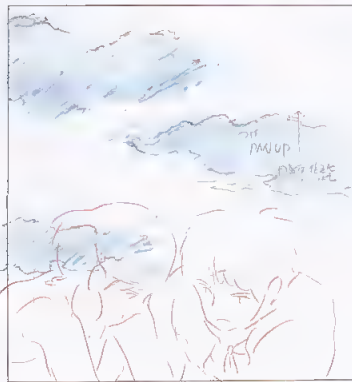
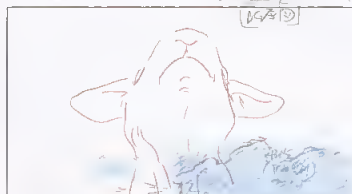
S. 0.1615 (0.1615) TIME: +3



Left, Shot 1615 (Character) Right, Shot 1615 (Background)

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S. 0.1614 TIME: +3



Shot 1614

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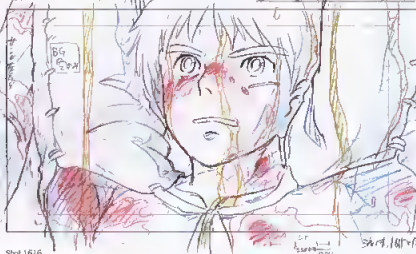
STUDIO GHIBLI CO., LTD.

STUDIO GHIBLI CO., LTD.

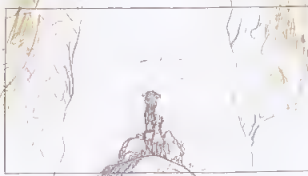
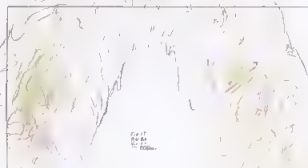
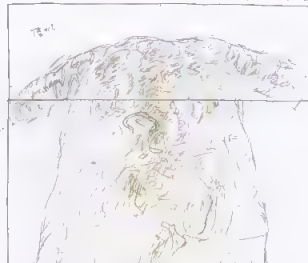
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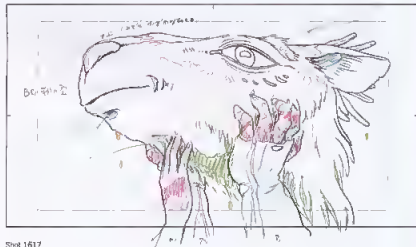
Shot 1616



Shot 1619

STUDIO GHIBLI CO., LTD.

STUDIO GHIBLI CO., LTD.



Shot 1617

STUDIO GHIBLI CO., LTD.

LAST S C 1620/1624 TIME (+)



Left Shot 1620 1624 (Character) Right Shot 1620, 1624 (Background)



STUDIO GHIBLI CO., LTD.

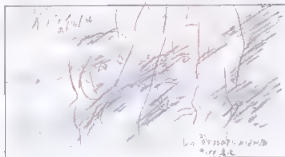
S C 1621/1625 TIME (+)



Shot 1621

STUDIO GHIBLI CO., LTD.

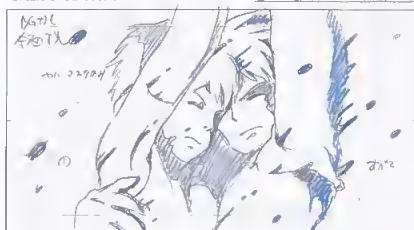
S C 1622/1626 TIME (+)



Shot 1622 (Background)

STUDIO GHIBLI CO., LTD.

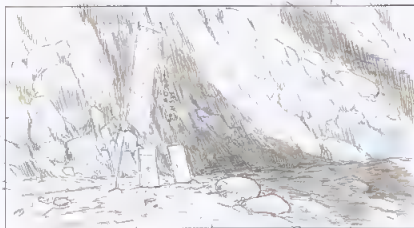
S C 1625/1629 TIME (+)



Shot 1625

STUDIO GHIBLI CO., LTD.

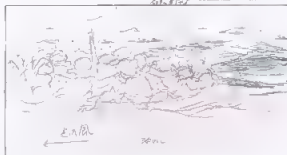
S C 1639/1643 TIME (+)



Shot 1639

STUDIO GHIBLI CO., LTD.

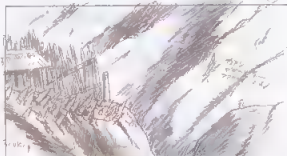
1/25 1643 C. 1643 TIME 1



Shot 1643

STUDIO GHIBLI CO., LTD.

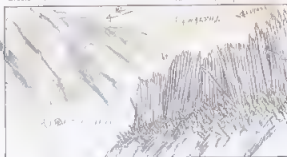
1/25 1640 C. 1640 TIME 1



Shot 1640

STUDIO GHIBLI CO., LTD.

1/25 1641 C. 1641 TIME 1



Shot 1641

STUDIO GHIBLI CO., LTD.

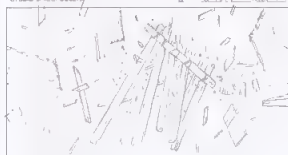
1/25 1642-1 C. 1642-1 TIME 1



Left Shot 1642-1 Right Shot 1642-2

STUDIO GHIBLI CO., LTD.

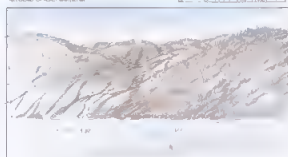
1/25 1644 C. 1644 TIME 1



Shot 1644

STUDIO GHIBLI CO., LTD.

1/25 1645 C. 1645 TIME 1

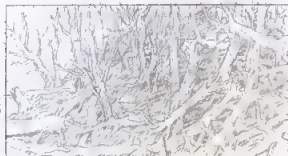


Shot 1645



STUDIO GHIBLI CO., LTD.

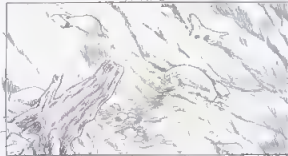
S. C. 1646-81 TIME (2:12)



Shot 1646

STUDIO GHIBLI CO., LTD.

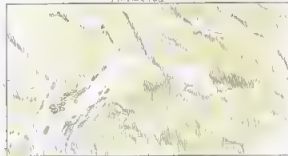
S. C. 1647(2-8) TIME (2:13)



Shot 1647 (8-①)

STUDIO GHIBLI CO., LTD.

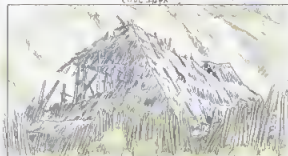
S. C. 1647(2-8) TIME (2:13)



Shot 1647 (8-②)

STUDIO GHIBLI CO., LTD.

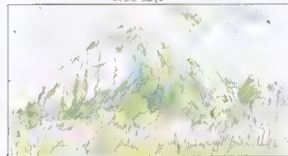
C. C. 1648-81 TIME (2:14)



Shot 1648-①

STUDIO GHIBLI CO., LTD.

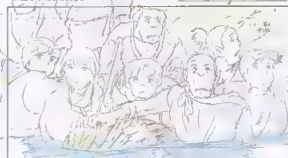
C. C. 1648-81 TIME (2:14)



Shot 1648-②

STUDIO GHIBLI CO., LTD.

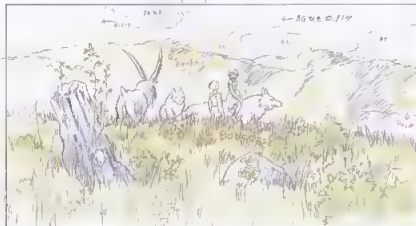
S. C. 1649 TIME (2:15)



Shot 1649

STUDIO GHIBLI CO.,LTD

S. C. 1661 TIME(8+0)

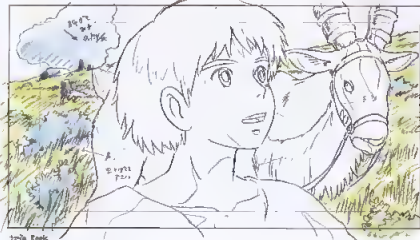


Shot 1661, 1665

3/4 1136/5 2/17 1/10 5/7

STUDIO GHIBLI CO.,LTD 67-4

S. C. 1663 TIME(20)

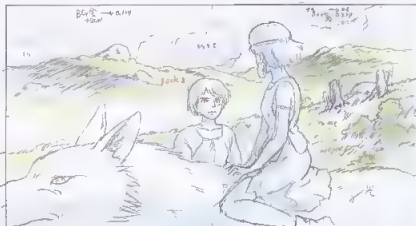


Shot 1663

Shot 1663

STUDIO GHIBLI CO.,LTD.

S. C. 1662 TIME(8+0)



Shot 1662

STUDIO GHIBLI CO.,LTD.

S. C. 1664 TIME(8+2)



Shot 1664

Production Diary August 1994 – June 17, 1997

By Kazuyoshi Tanaka (Production Desk)

This production journal first appeared on the Studio Ghibli website. Entries unrelated to the production of *Princess Mononoke* have been excluded. Some of the names of the crew that could not be revealed prior to the production announcement in March 10, 1997, remain concealed here. Story spoilers have also been concealed.

■ August '94

Hayao Miyazaki begins work on story and concept sketches

■ December '94

"The production is halted to work on the short 'On Your Mark'

■ April '95

4/3 [Mon] Masashi Ando begins work on character design based on Miyazaki's concept sketches

4/19 [Wed] Miyazaki completes project proposal for Process Mononoke

■ May '95

5/2 [Tue] Storyboarding begins on specially ordered B4-sized landscape sheets with three panels in a page (Specially use B4-sized portrait sheets with five panels)

5/14 [Sat] The staff departs on five-day bus night trip to Yatsushiro for location scouting. Senior staff members are on the scouting team: director Hayao Miyazaki, supervising animator Masahiro Ando, ten art-directing duo of Nobuo Yamamoto, Mayu Tanaka, and Yoji Takeshige, background artists Kyoko Tanaka, Kyoko Ohi, Naoko Kasugai, Ryoko Inai, Sayaka Iwatsuki, and Yoshiko Fukuoka, animators Masao Shinohara and Hitomi Tatem, Yoshitaka Morimoto and Yoshinori Sugano, lead CG room; Kazuyoshi Tsuruta from the production desk

5/15 [Mon] A walk on a breathtaking hiking course at Shiratorii Unsuigo Kawa. So many majestic cedars in the rimmed forest

5/16 [Tue] The team reaches the rural car to the southwestern part of the island to the Iwagawa forest region. The main goal of this scouting trip

5/17 [Wed] Observed the forest at Yatsushiro Land

5/18 [Thu] The team departs the island at 6am and heads to the Jomon Sui, the oldest and largest city/temple zone at the island. The trip takes ten hours round-trip, and so spend only thirty minutes at the Jomon Site. The rest of the time is spent walking.

Dinner on a traditional horseboat. Amid the glow of lanterns and sea sounds, the team enjoys the last night of the trip having delicious fish fried flying fish. Back to Tokyo the next day

5/22 [Mon] Set up the male staff room for Process Mononoke on the second floor, north side of the Ghibli offices. The animation staff assemble at this bar area for production meeting

5/27 [Sat] Rough-cut screening of "On Your Mark"

■ June '95

6/1 [Thu] Established CG room. Yoshinori Sugano moves on day-to-day temporary loan from Nagoya Television's Graphics & Design Department. Animator Yoshiyuki Morimoto also joins the staff as a designer

6/7 [Wed] Ghibli staff attends screenings of Whisper at Ten Halls "On Your Mark" in Imagawa. A party at a hotel in Kichijoji afterward

6/9 [Fri] Miyazaki and producer Toshio Saitoh embark on a press trip to promote Whisper of the Heart. They will travel the country over the next three weeks

6/10 [Sat] Kaoru Oga to create the concept art for the opening sequence at the Ensuiko village located in what is now known as the Tokuro region

6/15 [Thu] A meeting about mounting the demo on the opening sequence entirely in CG. Tests begin

6/15 [Mon] Whisper of the Heart premieres at Toei Kōza Main and Nippon Gate

6/22 [Thu] Two tests are planned: one in which the demon spirit will be animated in CG and the other hand-drawn

6/24 [Sat] Hayao Miyazaki joins the production as assistant director

6/25 [Mon] Hitomi Tatem, Katsutoshi Nakamura and Masayuki Saito will oversee the animation check

6/28 [Wed] Color designer Mutsaers Headon's first day. STAC and Topy Shikoku, two of Japan's suppliers of acrylic paint, can no longer meet Ghibli's demand. Ordered samples from Chromacolor in Canada to see whether their paints will work for this production

■ July '95

7/1 [Sat] The entire Ghibli staff is assembled for a meeting, outlining the concept for Process Mononoke. Art director Satoshi Kuroda finishes work on Whisper of the Heart and joins the production

7/10 [Mon] Storyboards for 134 shots (11min 30sec) completed. Following the first meeting work begins on key animation with 11 staff of housework. Eleven of the 134 shots will involve CG in some form

7/17 [Thu] Art director Yoji Takeshige, delayed by "On Your Mark," joins the production. The film

will have 11 unprecedented five staff members overseeing art direction

7/14 [Fri] Screening of 35mm test rushes of the demo reel, marking the first rushes of this young production

7/17 [Mon] In response to Miyazaki's demand for "a special effects man who knows art direction," Yoshiyuki Tatemura, who's been with Ghibli since '94, is appointed to oversee special art effects. Special effects supervisor Kaoru Tsuruta will monitor him

7/20 [Thu] Sample paints arrive from Chromacolor in Canada

7/23 [Sun] A second team comprising primarily camera operators and digital rim and paint artists depart for Yatsushiro for location scouting

7/25 [Tue] We decide to go with Chromacolor paints to color parts of the film

■ August '95

One month off for summer break

■ September '95

9/1 [Fri] Storyboards for an additional 178 shots completed for a total of 352 shots (30min 15 sec). Shot 335 marks the end of Part A. Mitsunori Nakazawa, who's worked as CG for "On Your Mark," joins the CG room, making a staff of three

9/2 [Sat] Miyazaki is taken to the hospital by ambulance for kidney stones. He returns to the studio the same day

9/12 [Tue] After an in-staff promotion test, three staff members are promoted to key animation

9/18 [Mon] Key animator Shunji Osaka visits Tokyo University of Agriculture in Tanashi to observe cows

9/27 [Wed] Assistant director Hayao Miyazaki visits Tama Zoological Park to observe butterflies for the swarm scene

10/3 [Sat] Meeting to discuss Part A photography

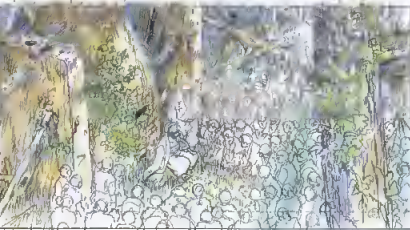
■ October '95

10/2 [Mon] Storyboards for an additional 147 one shots complete, including the revised storyboards for the opening scene for Part B. Total shots completed=391.

Key animator Yoshitaka Morimoto joins the production, with finishing up as Whisper of the Heart

10/18 [Mon] We conduct tests rushes at Imagawa to compare the resolution quality between Japanese

STUDIO GHIBLI CO., LTD. 1666 TIME (+)

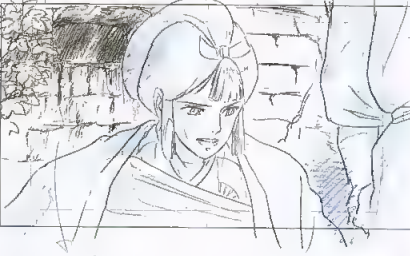


Shot 1666

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STUDIO GHIBLI CO., LTD. 1667 TIME (+)



Shot 1667

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Production Diary August 1994 – June 17, 1997

By Kazuyoshi Tanaka (Production Desk)

This production journal first appeared on the Studio Ghibli website. Entries unrelated to the production of *Princess Mononoke* have been removed. Some of the names of the cast that could not be revealed prior to the production anniversary were as of March 10, 1997, remain concealed in the story again in this edition for editorial reasons.

■ August '94

Hayao Miyazaki begins work on story and concept sketches.

■ December '94

"The production is halted to work on the short 'On Your Mark'."

■ April '95

4/3 [Mon] Masashi Ando begins work on character designs based on Miyazaki's concept sketches.

4/19 (Wed)

Miyazaki completes project proposal for *Princess Mononoke*.

■ May '95

5/2 [Tue] Storyboarding begins on specially ordered 84-sheet landscape sheets with three panels to a page. Typically use 84-sheet portrait sheets with five panels.

5/14 (Sun)

The staff departs on five-day tour night trip to Yakushima for location scouting. Staff members are on the scouting team: director Hayao Miyazaki, supervising animator Masashi Ando, the art-directing trio of Nizao Yamamoto, Naoya Tanaka, and Yoji Takeshige, background artists Ryoko Tanaka, Kiyoko Otsu, Naomi Kasuga, Ryoko Iino, Sayaka Hirahara, and Yoshikazu Furukawa, animators Masao Shimokata and Noboru Tanaka, Yoshiyuki Momose and Yoshinori Sugino from the CG room, Kazuyoshi Tanaka from the production desk.

5/15 (Mon)

A walk on in brushstroke, having course at Shikoku Unesco Reserve. No many majestic cedars in the remaining forest.

5/16 (Tue)

The team heads via rental car to the southwestern part of the island to the overseas forest region, the main goal of this scouting trip.

5/17 (Wed)

Observed the forest at Yakusugi Land.

5/18 (Thu)

The team departs the inn at 6am and heads for the Jomon Site, the oldest and largest archaeological site on the island. The trip takes ten hours roundtrip, and we spend only thirty minutes at the Jomon Site. The rest of the trip is spent walking.

Dinner at a traditional houseboat. Amid the glow of lanterns and sea sparkle, the team enjoys the last night of the trip savoring delicious fish and drinking. Back to Tokyo the next day.

5/22 (Mon)

Set up the main staff room for *Princess Mononoke* on the second floor, north side of the Ghibli offices. The animation staff assemble at the art area for production meeting.

5/27 (Sat)

Rough-cut screening of "On Your Mark."

■ June '95

6/1 (Thu) Established CG room. Yoshinori Sugino arrives on two-year temporary loan from Kogoro Tetsudori's Graphics & Design Department. Animator Yoshiyuki Momose joins the staff as a designer.

6/7 (Wed)

Ghibli staff attends screenings of *Whisper of the Heart* and "On Your Mark" at Toho. A party at a hotel in Kichijoji afterward.

6/9 (Fri)

Miyazaki and producer Toshio Suzuki embark on a press junket to promote *Whisper of the Heart*. They will travel the country over the next three weeks.

6/10 (Sat)

Kazuo Ogi to control the concept art for the opening sequence at the Emishi village located in what is now known as the Tohoku region.

6/15 (Thu)

A meeting about animating the canon spirit in the opening sequence artwork in CG. Tests begin.

6/19 (Mon)

Whisper of the Heart premieres at Toho in the Marion and Nippon Gyoza.

6/22 (Thu)

Two tests are planned, one in which the demon spirit will be animated in CG and the other hand-drawn.

6/24 (Sat)

Kireyuku Ito joins the production as assistant director.

6/26 (Mon)

Hidetao Takeda, Kazuo Ogi, Nakamura and Masao Sakai will oversee the animation check.

6/28 (Wed)

Color designer Michio Yoda's first day. STAG and Taro Shibusawa, two of Japan's suppliers of acrylic paint, can no longer meet Ghibli's demand. Ogi sends samples from Chromacolor in Canada to see whether their paints will work for the production.

■ July '95

7/1 (Sat) The entire Ghibli staff is assembled for a meeting outlining the concept for *Princess Mononoke*. Art director Satoshi Kuroda finishes work on *Whisper of the Heart* and joins the production.

7/10 (Mon)

Storyboarding for 134 shots (113 min) 30sec completed. Following the first meeting work begins on key animation with a staff of fourteen. Eleven of the 134 shots will involve CG in some form.

7/11 (Tue)

Art director Yoji Takeshige, delayed by "On Your Mark," joins the production. The film

will have an unprecedented five staff members overseeing art direction.

7/14 (Fri)

Screening of 35min test images of the demon spirit, marking the first scenes of the young person.

7/17 (Mon)

In response to Miyazaki's demand for "a special effects man who knows art direction," Yoshikazu Furukawa, who's been with Ghibli since '94, is appointed to oversee special effects. Special effects supervisor Katsu Taniguchi will monitor him.

7/20 (Thu)

Sample paints arrive from Chromacolor in Canada.

7/23 (Sat)

A second team comprising primarily names operators and digital ink and paint artists depart for Yakushima for location scouting.

7/25 (Tue)

We decide to go with Chromacolor paints to color parts of the film.

■ August '95

One month off for summer break.

■ September '95

9/1 (Fri) Storyboards for an additional 178 shots completed for a total of 312 shots (30min 19 sec). Shot 335 marks the end of Part A. Mitsunori Nakamura, who'd worked on CG for "On Your Mark," joins the CG room, making a staff of three.

9/2 (Sat)

Miyazaki is taken to the hospital by ambulance for kidney stones. He returns to the studio the same day.

9/12 (Tue)

After an in-staff promotion test, three staff members are promoted to key animation.

9/18 (Wed)

Key animator Shoji Osuka visits Tokyo University of Agriculture in Tanashi to observe cows.

9/27 (Mon)

Assistant Director Katsuyuki Ito visits Tama Zoological Park to observe hooftails for the swamp scene.

9/30 (Sat)

Meeting at Daizawa Print A photography.

■ October '95

10/2 (Wed) Storyboards for an additional 147 shots complete, including the revised storyboards for the opening scene for Part B. Total shots completed=391.

Key animator Yoshinori Kondo joins the production, while finishing up on *Whisper of the Heart*.

10/18 (Wed)

We conduct tests to see if we can compare the traditional quality between Japanese

ASSISTANT TO THE DIRECTOR Hiroshi Ma
 ADDITIONAL ASSISTANTS TO THE DIRECTOR
 Kenji Yano
 PRODUCTION MANAGER Tomoko Katsukida
 PRODUCTION DESIGNER Kazuyuki Tsukada Takahiko Miyajima
 PRODUCTION ASSISTANTS
 Kenji Yano
 PRODUCTION ADMINISTRATOR
 Shunichi Hiramatsu Toshiro Nakagawa
 PUBLIC RELATIONS
 Kenji Yano
 WEBSITES/ONLINE DEVELOPMENT
 Kenji Yano

OUTREACH/COMMUNITY
 Kenji Yano

ASSISTANT TO THE PRODUCER Takahiko Miyajima

PUBLISHING DEVELOPMENT Takahiko Miyajima

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THE ART OF PRINCESS MONONOKE

Based on a Studio Ghibli Film by Hayao Miyazaki

English Adaptation/Takumi Noda

Design & Layout/Takumi Evans

Copy Editor/Rebecca Downer

Editor/Nick Mamatas

St. Editorial Director/Masumi Washington

Mononoke Home (Princess Mononoke)

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